Clay County
Roadway Impact Fee
Update Study

DRAFT REPORT
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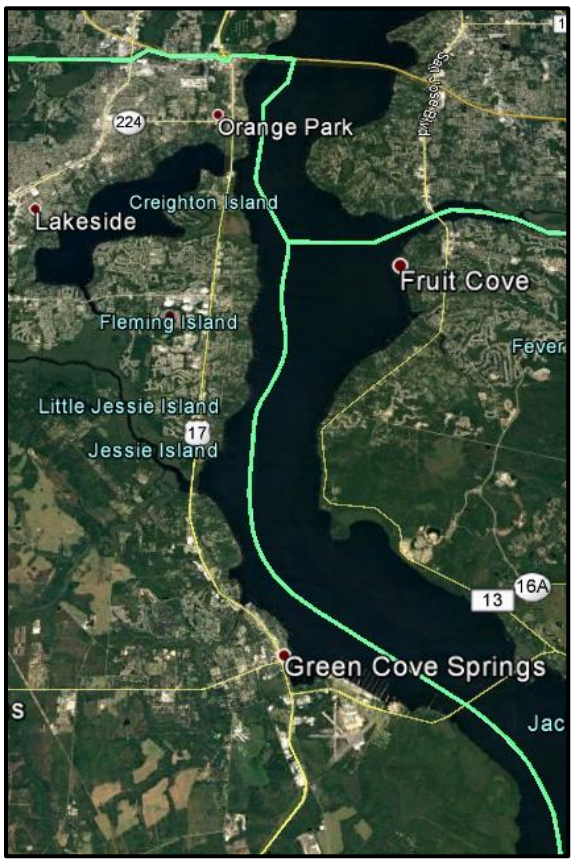
Tindale Oliver
planning | design | engineering



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CLAY COUNTY
ROADWAY IMPACT FEE UPDATE STUDY

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Introduction

Clay County's Roadway Impact Fee was last calculated in a February 2008 technical study with an effective date of January 1, 2009 to assist the County in providing adequate transportation facilities for expected growth. In January 2009, the Clay County Board of County Commissioners placed a moratorium on the collection of road impact fees. This moratorium was revisited and extended multiple times and the fees still remain suspended since then.

Given that the moratorium will be revisited later in 2017 and to reflect current conditions, the County has retained Tindale Oliver to update the impact fee technical study. This study reflects changes to the cost, credit, and demand components since the 2008 study and presents technically calculated levels of impact fees that the County could charge. However, the Board of County Commissioners may choose to discount the fees as a policy decision. Discounts can be applied to all land uses evenly or to select land uses and/or to subareas to support the County's economic development and growth management goals, such as:

- Incentives for certain land uses, such as office and/or industrial that tend to create jobs, bring higher wages, etc.;
- Promotion of development within certain geographic areas;
- Encourage efficient mixed-use development; and
- Affordable workforce housing.

A discussion of potential discounts are included later in this report.

Consistent with the State of Florida Impact Fee Act requirements, the information used to develop the Clay County Roadway Impact Fee schedules is based on the most recent and localized data available, as collected in early 2017.

Legal Overview

Since the early 1980's, in Florida, the legal basis and standards related to the assessment, collection and use of impact fees has primarily been established through case law. In 2006, the Florida Legislature approved the "Florida Impact Fee Act" incorporating into Statutes the authorization for local and county governments to assess, collect and use impact fees provided that a series of specific standards were met. Generally speaking, and down to the simplest of definitions, for impact fees to be assessed, collected or used, the impact fee must comply with the "dual rational nexus" test, which requires that the fee:

- Be supported by a study demonstrating that the fee levels are proportionate in amount to the need created by new development paying the fee; and
- Be spent in a manner that directs a proportionate benefit to new development, typically accomplished through a list of capacity-adding projects included in the County's Capital Improvement Plan, Capital Improvement Element, or another planning document/Master Plan.

As noted above, in 2006, the Florida legislature passed the "Florida Impact Fee Act," which recognized impact fees as "an outgrowth of home rule power of a local government to provide certain services within its jurisdiction." § 163.31801(2), Fla. Stat. The statute – concerned with mostly procedural and methodological limitations – did not expressly allow or disallow any particular public facility type from being funded with impact fees. The Act did specify procedural and methodological prerequisites, such as the requirement of the fee being based on most recent and localized data, a 90-day requirement for fee changes, and other similar requirements, most of which were common to the practice already.

More recent legislation further affected the statewide impact fee framework in Florida, including the following:

- **HB 227 in 2009:** The Florida legislation statutorily clarified that in any action challenging an impact fee, the government has the burden of proving by a preponderance of the evidence that the imposition or amount of the fee meets the requirements of state legal precedent or the Impact Fee Act and that the court may not use a deferential standard.
- **SB 360 in 2009:** Allowed fees to be decreased without the 90-day notice period required to increase the fees and purported to change the standard of legal review associated with impact fees. SB 360 also required the Florida Department of Community Affairs (now the Department of Economic Opportunity) and Florida Department of Transportation (FDOT) to conduct studies on "mobility fees," which were completed in 2010.
- **HB 7207 in 2011:** Required a dollar-for-dollar credit, for purposes of concurrency compliance, for impact fees paid and other concurrency mitigation required. The payment must be reduced by the percentage share the project's traffic represents of the added capacity of the selected improvement (up to a maximum of 20 percent or to an amount specified by ordinance, whichever results in a higher credit).

- **HB 319 in 2013:** Applied mostly to concurrency management authorities, but also encouraged local governments to adopt alternative mobility systems using a series of tools identified in section 3180(5)(f), Florida Statutes, including:

    1. Adoption of long-term strategies to facilitate development patterns that support multimodal solutions, including urban design, and appropriate land use mixes, including intensity and density.
    2. Adoption of an area-wide level of service not dependent on any single road segment function.
    3. Exempting or discounting impacts of locally desired development, such as development in urban areas, redevelopment, job creation, and mixed use on the transportation system.
    4. Assigning secondary priority to vehicle mobility and primary priority to ensuring a safe, comfortable, and attractive pedestrian environment, with convenient interconnection to transit.
    5. Establishing multimodal level of service standards that rely primarily on non-vehicular modes of transportation where existing or planned community design will provide adequate level of mobility.
    6. Reducing impact fees or local access fees to promote development within urban areas, multimodal transportation districts, and a balance of mixed-use development in certain areas or districts, or for affordable or workforce housing.

Also, under HB 319, a mobility fee funding system expressly must comply with the dual rational nexus test applicable to traditional impact fees. Furthermore, any mobility fee revenues collected must be used to implement the local government's plan, which served as the basis for the fee. Finally, under HB 319, an alternative mobility system, that is not mobility fee-based, must not impose upon new development any responsibility for funding an existing transportation deficiency.

At this time, Clay County has not expressed an interest in implementing a mobility fee primarily due to the suburban/rural nature of the county and the need to provide regional transportation connectivity through roadway construction.

The following paragraphs provide further detail on the generally applicable legal standards applicable here.

Impact Fee Definition

- An impact fee is a one-time capital charge levied against new development.
- An impact fee is designed to cover the portion of the capital costs of infrastructure capacity consumed by new development.
- The principle purpose of an impact fee is to assist in funding the implementation of projects identified in the Capital Improvements Element (CIE) and other capital improvement programs for the respective facility/service categories.

Impact Fee vs. Tax

- An impact fee is generally regarded as a regulatory function established as a condition for improving property and is not established for the primary purpose of generating revenue, as are taxes.
- Impact fee expenditures must convey a proportional benefit to the fee payer. This is accomplished through the establishment of benefit districts, where fees collected in a benefit district are spent in the same benefit district.
- An impact fee must be tied to a proportional need for new infrastructure capacity created by new development.

Methodology

This study presents two common methodologies for calculating the roadway the impact fee:

- Consumption-based
- Needs-based

Consumption-Based Impact Fee

A consumption-based impact fee calculation is a common methodology used by many Florida jurisdictions, which charges new development based upon the burden that the new development activity places on roadways from each land use (demand). Consumption-based fees provide a conservative estimate of impact fees, allowing the transportation system to operate at a volume-to-capacity (V/C) ratio of 1.00 based on the County's adopted LOS standards, which represents a more congested network than Clay County's current V/C ratio of 0.48. The general equation used to compute the impact fee for a given land use is:

[Demand x Cost] – Credit = Fee

The "demand" for travel placed on a transportation system is expressed in units of Vehicle-Miles of Travel (VMT) (daily vehicle-trip generation rate x the trip length x the percent new trips [of total trips]) for each land use contained in the Roadway Impact Fee schedule. Trip generation represents the average daily rates since new development consumes trips on a daily basis.

The "cost" of building new capacity typically is expressed in units of dollars per vehicle-mile or lane-mile of roadway capacity.

The "credit" is an estimate of future non-impact fee revenues generated by new development that are allocated to provide transportation capacity expansion. The impact fee is considered to be an "up front" payment for a portion of the cost of building a lane-mile of capacity that is directly related to the amount of capacity consumed by each unit of land use contained in the impact fee schedule, that is not paid for by future tax revenues generated by the new development activity. These credits are required under the supporting case law for the calculation of impact fees where a new development activity must be reasonably assured that they are not paying, or being charged, twice for the same level of service.

Needs-Based Impact Fee

Currently, the roadway impact fee for Clay County is calculated using a needs-based methodology. A needs-based impact fee schedule is derived by specifying a horizon year, such as 2040, and determining what facilities would be required in that year to meet established standards. Once the future requirements are defined, the total cost to build the needed facilities is estimated. This figure is divided by the estimated vehicle miles of travel that is estimated to be generated by the new development during the planning period to establish a cost per vehicle-mile of travel. For example, a community with $100 million for road improvement needs through 2040 associated with 200,000 new vehicle-miles of travel would calculate a fee of $500 per VMT. Future needs based on existing conditions cannot be separated from growth needs.

Unlike the consumption-based analysis, which is based on a network V/C ratio of 1.00, the needs-based analysis is based on a fixed set of improvements that add capacity to the existing network. Typically, a needs-based impact fee rate may not allow for as much degradation to the current system as a consumption-based fee based on the number of improvements in the Needs Plan. The two needs-based scenarios detailed in this report obtain 2040 V/C ratios of 0.46 and 0.56 based on the projected volumes in the 2040 transportation model.

The remainder of this report consists of the following sections:

- Consumption-Based Fee Analysis
  - Demand Component
  - Cost Component
  - Credit Component
  - Calculated Roadway Impact Fee Schedule
- Needs-Based Fee Analysis
  - Demand Component
  - Cost Component
  - Credit Component
  - Calculated Roadway Impact Fee Schedule
- Summary of Calculated Roadway Impact Fee Rates
- Roadway Impact Fee Schedule Comparison

Consumption-Based Fee Analysis

Used by many Florida communities, the consumption-based methodology calculates roadway impact fees that are based on the adopted LOS standards, which is typically lower than the current achieved LOS on a countywide-basis. The current LOS standards are minimum standards to be achieved for individual roadways and does not reflect the overall achieved LOS of the existing system. In addition, while adopted LOS standards apply to each individual road's performance at peak period, impact fee calculations apply this standard on a daily basis countywide, resulting in a conservative fee. The consumption-based methodology used for roadway impact fees results in fee levels that slow down the degradation of the system, but do not generate sufficient revenues to maintain the performance of the overall system which is better than the adopted LOS standard. The adopted LOS standard sets the minimum performance levels for individual road links within the system. The ability to generate sufficient revenues improve as the LOS used in the calculations gets closer to the actual performance as long as there is a commitment by the County to provide the level of service included in the calculations.

Demand Component

Travel Demand

Travel demand is the amount of a transportation system consumed by a unit of new land development activity. Demand is calculated using the following variables and is measured in terms of the vehicle miles of new travel a unit of development consumes on the existing road system.

- Number of daily trips generated
- Average length of those trips
- Proportion of travel that is new travel, rather than travel that is already traveling on the road system and is captured by new development

As part of this update, the trip characteristics variables were obtained primarily from two sources: (1) trip characteristics studies previously conducted throughout Florida (Florida Studies Database), and (2) the Institute of Transportation Engineers' (ITE) *Trip Generation Handbook* (9th edition). No local trip generation rate studies were available for use in developing this 2017 update study.

The Florida Studies Database is included in Appendix A. The data identified in the trip characteristics database was collected throughout Florida using machine traffic counts and site specific land use origin-destination surveys for approximately 40 different land uses. In addition, trip generation data from the *ITE 9th Edition Trip Generation* report was used to supplement the Florida Studies Database. In instances where trip generation was available from the *ITE Trip Generation* report and the Florida Studies Database, a blended average calculation was used to increase the sample size.

The model trip lengths from the Northeast Regional Planning Model v2 (NERPM v2) were also reviewed and compared to trip lengths based on travel demand models for other jurisdictions to evaluate if an adjustment to the average trip lengths observed in the Florida Studies Database is needed. Given that average trip length in Clay County, as calculated by NERPM, is within the range of other jurisdictions' trip lengths, the average trip lengths resulted from origin-destination surveys in various sites throughout Florida are used in the study.

County Roadway Adjustment Factor

This variable is used to recognize that the roadway impact fee in Clay County only reflects travel associated with County owned/maintained roadways. Impact fee funds will not be used for State roadways, interstate improvements or roads owned/maintained by municipalities, and therefore, the portion of travel that occurs on these facilities is not charged. This adjustment factor of 39 percent was determined through a review of the 2040 vehicle-miles of travel distribution between City, County and State roads from the NERPM 2040 roadway network.

Cost Component

Roadway construction costs increased significantly in Florida between 2005 and 2007 due to additional construction demand caused by the 2004/05 hurricane season impacts, the high rate of growth in the state and national housing market, and other factors. Rapid appreciation in land values also resulted in higher right-of-way (ROW) costs during the same period. In early 2008, costs started to stabilize and between 2008 and 2011 most communities experienced a decrease in construction costs, returning to levels seen before 2005.

In 2013/2014, roadway construction costs again started to increase throughout Florida and have continued to increase statewide. Cost information from Clay County, other Florida Counties, and the Florida Department of Transportation (FDOT) was reviewed to develop a

unit cost for all phases involved in the construction of one lane-mile of roadway capacity. The following subsections summarize the methodology and findings of the total unit cost analysis for county and state roads. Appendix B provides the data and other support information utilized in these analyses.

County Roadway Costs

This section examines the right-of-way (ROW), construction, and other cost components associated with county roads with respect to transportation capacity improvements in Clay County. For this purpose, recent bid data for ongoing projects provided by the County and recent construction bid data from county roadway projects throughout Florida were used to identify and provide supporting cost data for county improvements. The cost for each roadway capacity project was separated into four phases: design, construction/engineering inspection (CEI), ROW and construction.

Design and CEI

Design costs for county roads were estimated at 10 percent of construction phase costs based on a review of recent transportation impact fee studies throughout Florida. Additional detail is provided in Appendix B, Table B-1.

CEI costs for county roads were estimated at eight (8) percent of construction phase costs based on a review of recent local improvements and cost data collected throughout Florida. Additional detail is provided in Appendix B, Tables B-7 and B-8.

Right-of-Way

The ROW cost reflects the total cost of the acquisitions along a corridor that were necessary to have sufficient cross-section width to widen an existing road or, in the case of new construction, to build a new road. A review of recent ROW cost data for Clay County identified three recent improvements with acquisition data:

- Old Jennings Road from SR 21 to Brananfield Road
- Henley Road from CR 218 to Black Creek Bridge
- CR 209 from Black Creek Bridge to CR 200

Using the construction cost for these improvements, a ROW-to-construction factor of 37 percent was calculated. This calculated local factor was slightly lower than county road ROW factors observed in recent impact fee studies throughout Florida, which average 40 percent. Given that the local data includes an outlier (CR 209 improvement) with a six (6) percent

factor, for purposes of the impact fee calculation, a 40 percent ROW factor was utilized. Additional detail is provided in Appendix B, Tables B-2 and B-3.

Construction

The construction cost for county roads was based on a review of local and statewide projects. A review of recent construction cost data for Clay County identified three recent capacity expansion improvements averaging $2.77 million *per lane mile*, as shown in Appendix B, Table B-4.

- Old Jennings Road from SR 21 to Brananfield Road
- Henley Road from CR 218 to Black Creek Bridge
- CR 209 from Black Creek Bridge to CR 200

In addition to local improvements, recent bids from multiple communities throughout the state were also reviewed. This review included more than 340 lane miles of urban design roadway improvements from 18 counties and calculated an average cost of $2.17 million per lane mile. Appendix B, Table B-5 provides a detailed description of the projects reviewed.

Based on this review, a county roadway cost of *$2.50 million per lane mile* was used in the roadway impact fee calculation for county roads with urban design characteristics. This reflects an average of the roadway construction costs from the local projects and other Florida jurisdictions, providing a relatively conservative estimate for impact fee purposes.

When all costs components are added, the total cost of constructing a roadway with urban design characteristics is estimated at $3.9 million per lane mile, as presented in Table 1.

Table 1
Estimated Total Cost per Lane Mile for County Roads

Cost Phase	Urban Design
Design[(1)]	$250,000
Right-of-Way[(2)]	$1,000,000
Construction[(3)]	$2,500,000
CEI[(4)]	$200,000
Total Cost	**$3,950,000**

1) Design is estimated at 10% of construction
2) ROW is estimated at 40% of construction
3) Source: Appendix B, Table B-5
4) CEI is estimated at 8% of construction

All figures rounded to nearest $1,000

To determine the cost per lane mile for county roads with rural (open drainage) design characteristics, the relationship between urban design and rural design roadways costs was reviewed. With no local data available, recent data from the FDOT District 7 Long Range Estimates (LRE) was reviewed[1]. Based on these costs estimates, the cost for roadways with rural-design characteristics are estimated to be approximately 77 percent of the costs for roadways with urban-design characteristics. Additional data is provided in Appendix B, Table B-6.

Summary of Costs (Blended Cost Analysis)

To determine the weighted average cost for county roadways, the cost for urban-design and rural-design roadways were weighted based on the distribution of urban and rural roadways included in the County's 2040 Long Range Transportation Plan (Appendix B, Table B-9). As shown in Table 2, the weighted average county roadway construction cost was calculated as approximately $2.39 million per lane mile, with a total weighted average cost of $3.77 million per lane mile.

Table 2
Estimated Cost per Lane Mile for County Roadway Projects

Cost Type	Urban Design(1)	Rural Design(2)	Total(3)
Design	$250,000	$193,000	$239,000
Right-of-Way	$1,000,000	$770,000	$954,000
Construction	$2,500,000	$1,925,000	$2,385,000
CEI	$200,000	$154,000	$191,000
Total	**$3,950,000**	**$3,042,000**	**$3,769,000**
Lane Mile Distribution(4)	80%	20%	100%

1) Source: Table 1
2) Rural design is estimated at 77% of urban design costs
3) Lane mile distribution (Item 4) multiplied by the design, ROW, construction, and CEI phase costs by jurisdiction to develop a weighted average cost per lane mile
4) Source: Appendix B, Table B-9, Items (a) and (b)

All figures rounded to nearest $1,000

Capacity Added per Lane Mile

An additional component of the roadway impact fee equation is the capacity added per lane mile (also known as the maximum service volume added per mile) of roadway constructed. To calculate the vehicle miles of capacity (VMC) per lane mile of constructed future roadway,

[1] This data was not available for FDOT District 2

an analysis of the 2040 LRTP cost feasible and needs projects (see Appendix B, Table B-9) was conducted. As shown in Table 3, the resulting average capacity per lane mile calculated based on these projects is 9,000.

Table 3
Weighted Average Vehicle-Miles of Capacity per Lane Mile

Source	Lane Mile Added[1]	Vehicle-Miles of Capacity Added[1]	VMC Added per Lane Mile[2]
County Roads	192.60	1,735,335	9,010
Average VMC Added per Lane Mile (Rounded)[3]			**9,000**

1) Source: Appendix B, Table B-9
2) Vehicle miles of capacity added divided by lane miles added
3) VMC added per lane mile (Item 2) rounded to the nearest hundred

Cost per Vehicle-Mile of Capacity Added

The impact fee cost per unit of development is assessed based on the cost per vehicle-mile of capacity. It is important to note that the cost developed under the consumption-based approach represents the average cost to add capacity while the cost component that will be explored under the needs-based approach reflects the total system cost associated with a set of improvements that are identified to address a certain level of increase in vehicle miles of travel within a given time frame. As presented in Tables 2 and 3, the cost and capacity for county roads has been calculated based on typical roadway improvements. As shown in Table 4, the cost per VMC for travel within Clay County is approximately $419. This average cost per VMC figure is used in the impact fee calculation to determine the total impact cost per unit of development based on the vehicle-miles of travel consumed. For each vehicle-mile of travel that is added to the road system, approximately $419 of roadway capacity is consumed.

Table 4
Weighted Average Cost per Vehicle-Mile of Capacity Added

Source	Cost per Lane Mile[1]	Average VMC Added per Lane Mile[2]	Cost per VMC[3]
County Roads	$3,769,000	9,000	**$418.78**

1) Source: Table 2
2) Source: Table 3
3) Cost per lane mile (Item 1) divided by average capacity added per lane mile (Item 2)

Capacity projects eligible for impact fee funding include not only new construction and lane additions, but also associated intersection improvements, traffic signalization, and other amenities and technology improvements that allow for additional vehicle capacity.

Credit Component

The credit component of the roadway impact fee accounts for the existing County funding sources that are being expended on transportation capacity expansion (excluding impact fee funds). This section summarizes the calculations utilized in the credit for non-impact fee contributions. Additional details are provided in Appendix C.

The present value of the portion of non-impact fee funding generated by new development over a 25-year period that is expected to be expended on capacity expansion projects was credited against the cost of the system consumed by travel associated with new development. In order to provide a connection to the demand component, which is measured in terms of travel, the non-impact fee dollars were converted to a fuel tax equivalency.

As shown in Table 5, Clay County spends the equivalent of 2.9 pennies on transportation capacity-expansion projects funded with non-impact fee revenues (sales tax, etc.). In August 2016, the County renewed the local government infrastructure sales surtax and extended collection for an additional 20 years (through 2039). For impact fee purposes it is assumed that the portion of the sales tax revenue dedicated to transportation will remain at its current level throughout the life of the sales tax.

In March 2017, Clay County voted to adopt the 5-cent 2nd local option fuel tax and will dedicate all of the proceeds to transportation capacity improvements. The new gas tax goes into effect January 1, 2018. Clay County already collects the 6-cent 1st local option fuel tax and the 9th cent fuel tax and dedicates all of the revenues to roadway operations and maintenance.

In addition, the County uses an equivalent credit of 11.4 pennies for debt service associated with roadway capacity-expansion improvements. However, the bond will be paid off in two years and there are no plans to issue new sales tax bonds. Therefore, only two years of debt service credit is included in the impact fee calculations.

In summary, Clay County contributes 7.2 equivalent pennies for roadway capacity-expansion projects and 11.4 pennies for outstanding debt service for the next two years. These equivalent pennies were included in the roadway impact fee equation to recognize the future capital revenue that is expected to be generated by new development from all non-impact fee revenues.

Table 5
Equivalent Pennies of Gas Tax Revenue

Credit	Equivalent Pennies per Gallon
County Revenues[1]	$0.029
County 2nd LOFT[2]	$0.043
County Debt Service[3]	$0.114

1) Source: Appendix C, Table C-2
2) Adopted by Clay County in 2017 and is allocated to capacity-expansion projects. Excludes the portion distributed to the municipalities.
3) Source: Appendix C, Table C-3

Present Worth Variables

Facility Life

The roadway facility life used in the impact fee analysis is 25 years, which represents the reasonable life of a roadway.

Interest Rate

This is the discount rate at which gasoline tax revenues might be bonded. It is used to compute the present value of the gasoline taxes generated by new development. The discount rate of 3.5 percent was used in the roadway impact fee calculation based on information on recent bond proposals provided by Clay County.

Fuel Efficiency

The fuel efficiency (i.e., the average miles traveled per gallon of fuel consumed) of the fleet of motor vehicles was estimated using the quantity of gasoline consumed by travel associated with a particular land use.

Appendix C, Table C-6 documents the calculation of fuel efficiency value based on the following equation, where "VMT" is vehicle miles of travel and "MPG" is fuel efficiency in terms of miles per gallon.

$$Fuel\ Efficiency = \sum VMT_{Roadway\ Type} \div \sum \left(\frac{VMT_{Vehicle\ Type}}{MPG_{Vehicle\ Type}} \right)_{Roadway\ Type}$$

The methodology uses non-interstate VMT and average fuel efficiency data for passenger vehicles (i.e., passenger cars and other 2-axle, 4-tire vehicles, such as vans, pickups, and SUVs) and large trucks (i.e., single-unit, 2-axle, 6-tire or more trucks and combination trucks) to calculate the total gallons of fuel used by each of these vehicle types.

The combined total VMT for the vehicle types is then divided by the combined total gallons of fuel consumed to calculate, in effect, a "weighted" fuel efficiency value that reflects the existing fleet mix of traffic on non-interstate roadways. The VMT and average fuel efficiency data were obtained from the most recent Federal Highway Administration's *Highway Statistics 2015*. Based on the calculation completed in Appendix C, Table C-6, the fuel efficiency rate to be used in the updated impact fee equation is 18.73 miles per gallon.

Effective Days per Year

An effective 365 days per year of operation was assumed for all land uses in the proposed fee. However, this will not be the case for all land uses since some uses operate only on weekdays (e.g., office buildings) and/or only seasonally (e.g., schools). The use of 365 days per year, therefore, provides a conservative estimate, ensuring that non-impact fee contributions are adequately credited against the fee.

Calculated Roadway Impact Fee Schedule

Detailed impact fee calculations for each land use are included in Appendix D, which includes the major land use categories and the impact fees for the individual land uses contained in each of the major categories. For each land use, Appendix D illustrates the following:

- Demand component variables (trip rate, trip length, and percent of new trips);
- Total impact fee cost;
- Annual capital improvement credit;
- Present value of the capital improvement credit;

- Net roadway impact fee;
- Current adopted Clay County roadway impact fee;
- Percent difference between the calculated impact fee and the current adopted impact fee.

It should be noted that the net impact fee illustrated in Appendix D is not necessarily a recommended fee, but instead represents the technically calculated impact fee per unit of land use that could be charged in Clay County.

For clarification purposes, it may be useful to walk through the calculation of an impact fee for one of the land use categories. In the following example, the net impact fee is calculated for the single-family residential detached land use category (ITE LUC 210) using information from the impact fee schedule included in Appendix D, Table D-5. For each land use category, the following equations are utilized to calculate the net impact fee:

Net Impact Fee = Total Impact Cost – Capital Improvement Credit

Where:

Total Impact Cost = ([Trip Rate × Assessable Trip Length × % New Trips] / 2) × (County Roadway Adjustment Factor) × (Cost per Vehicle-Mile of Capacity)

Capital Improvement Credit = Present Value (Annual Capital Improvement Credit), given 3.5% interest rate & a 25-year facility life

Annual Capital Improvement Credit = ([Trip Rate × Total Trip Length × % New Trips] / 2) × (Effective Days per Year × $/Gallon to Capital) / Fuel Efficiency

Each of the inputs has been discussed previously in this document; however, for purposes of this example, brief definitions for each input are provided in the following paragraphs, along with the actual inputs used in the calculation of the fee for the single-family detached residential land use category (2,000 sq ft):

- *Trip Rate* = the average daily trip generation rate, in vehicle-trips/day (7.81)
- *Assessable Trip Length* = the average trip length on collector roads or above, for the category, in vehicle-miles (6.62) (excluding local neighborhood roads).
- *Total Trip Length* = the assessable trip length plus an adjustment factor of half a mile, which is added to the trip length to account for the fact that gas taxes are collected for travel on all roads including local roads (6.62 + 0.50 = 7.12)

- *% New Trips* = adjustment factor to account for trips that are already on the roadway (100%)
- *Divide by 2* = the total daily miles of travel generated by a particular category (i.e., rate*length*% new trips) is divided by two to prevent the double-counting of travel generated between two land use codes since every trip has an origin and a destination
- *County Roadway Adjustment Factor* = adjustment factor to account for the travel demand occurring on county roadway only (39%)
- *Cost per Lane Mile* = unit cost to construct one lane mile of roadway, in $/lane-mile ($3,769,000)
- *Average Capacity Added per Lane Mile* = represents the average daily traffic on one travel lane at capacity for one lane mile of roadway, in vehicles/lane-mile/day (9,000)
- *Cost per Vehicle-Mile of Capacity* = unit of vehicle-miles of capacity consumed per unit of development. Cost per lane mile divided by average capacity added per lane mile ($3,769,000 / 9,000 = $418.78)
- *Present Value* = calculation of the present value of a uniform series of cash flows, gas tax payments in this case, given an interest rate, "i," and a number of periods, "n;" for 3.50% interest and a 25-year facility life, the uniform series present worth factor is 16.4815. For outstanding debt service, which will be paid off over the next two years, the present worth factor is 1.8997
- *Effective Days per Year* = 365 days
- *$/Gallon to Capital* = the amount of equivalent gas tax revenue per gallon of fuel that is used for capital improvements, in $/gallon ($0.072 for sales/fuel tax; $0.114 for bonds)
- *Fuel Efficiency* = average fuel efficiency of vehicles, in vehicle-miles/gallon (18.73)

<u>Consumption-Based Roadway Impact Fee Calculation</u>

Using these inputs, a net impact fee can be calculated for the single-family residential detached (2,000 sf) land use category as follows:

Total Impact Cost = ([7.81 * 6.62 * 1.0] /2) * (0.39) * ($3,769,000/9,000) = **$4,222**

Annual Sales/Fuel Tax Credit = ([7.81 * 7.12 * 1.0] /2) * 365 * ($0.072 /18.73) = $39
Sales/Fuel Tax Credit = $39 * 16.4815 = $643

Annual Bond Credit = ([7.81 * 7.12 * 1.0] /2) * 365 * ($0.114 /18.73) = $62
Bond Credit = $62 * 1.8997 = $118

Total Credit = $643 + $118 = **$761**

Net Impact Fee = $4,222 – $761 = **$3,461**

This fee rate reflects a credit for travel on all roads, not just county roads, which results in conservative fee levels.

Level-of-Service Analysis

As discussed previously, Clay County's current adopted LOS standards of "D" (rural area) and "E" (urban and transitioning areas) are used in the consumption-based calculations. The use of these standards results in a conservative fee that slow down the degradation of the system, but do not generate sufficient revenues to maintain the existing conditions. As shown in Figure 1, Clay County's current achieved system-wide level-of-service, measured in terms of the ratio of traffic volume to available capacity is better at ≈0.48 than the adopted LOS standard for individual roadways of 1.00.

Figure 3

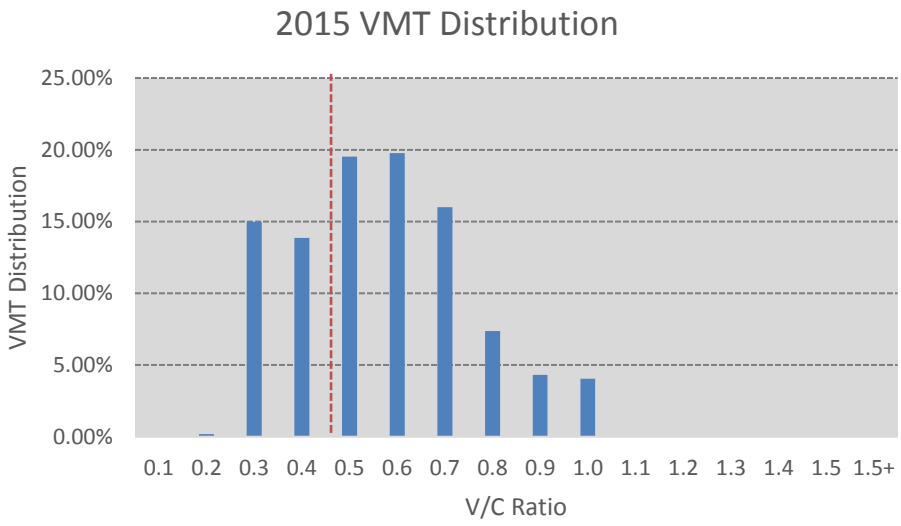

Table 6 illustrates alternative consumption-based fee levels that would serve to maintain the current V/C of 0.48 for the county roadway system. Additional scenarios are calculated using a 0.46 V/C ratio and a 0.56 V/C ratio, which correspond to the V/C ratios achieved with the needs-based scenarios detailed in the next section of this report. To calculate the alternate consumption-based fee, the added VMC per lane mile figure of 9,000 (Table 3) was adjusted by 0.46 (Needs Plan), 0.48 (current system performance) and 0.56 (Needs Plan_Alternative). The County has the option to implement a fee that is based on a V/C ratio that is between the achieved LOS and adopted standard as long as there is a commitment to continue to provide this same LOS in the future.

Table 6
Consumption-Based Fee Rates – V/C Differentiation

ITE LUC	Land Use	Unit	Consumption V/C 0.46[1]	Consumption V/C 0.48[2]	Consumption V/C 0.56[3]	Consumption V/C 1.00[4]
	RESIDENTIAL:					
210	Single Family (Detached); less than 1,500 sf & very low income	du	$2,959	$2,824	$2,382	$1,214
	Single Family (Detached); less than 1,500 sf & low income	du	$4,445	$4,242	$3,578	$1,824
	Single Family (Detached); less than 1,500 sf	du	$6,718	$6,413	$5,410	$2,764
	Single Family (Detached); 1,500 to 2,499 sf	**du**	**$8,417**	**$8,035**	**$6,778**	**$3,461**
	Single Family (Detached); 2,500 sf or larger	du	$9,507	$9,076	$7,656	$3,910
220	Multi-Family (Apartment)	du	$5,469	$5,220	$4,401	$2,242
230	Residential Condominium/Townhouse	du	$4,768	$4,551	$3,837	$1,952
240	Mobile Home Park	du	$3,112	$2,970	$2,504	$1,273
253	Assisted Living/Congregate Care Facility	du	$809	$772	$651	$330
260	Recreational Home/Vehicle	du	$3,403	$3,248	$2,740	$1,397
	LODGING:					
310	Hotel	room	$4,232	$4,039	$3,407	$1,737
320	Motel	room	$3,049	$2,910	$2,453	$1,245
	RECREATION:					
430	Golf Course[5]	1,000 sf	$13,788	$13,155	$11,072	$5,575
		hole	$34,665	$33,090	$27,915	$14,252
491	Racquet Club	1,000 sf	$11,042	$10,540	$8,889	$4,531
	INSTITUTIONS:					
520	Elementary School (Private)	1,000 sf	$8,606	$8,213	$6,923	$3,518
522	Middle School (Private)	1,000 sf	$8,650	$8,256	$6,960	$3,538
530	High School (Private)	1,000 sf	$8,095	$7,726	$6,513	$3,313
540	University (7,500 or fewer students)	student	$1,940	$1,852	$1,563	$798
550	University (more than 7,500 students)	student	$1,451	$1,384	$1,167	$594
560	Place of Worship	1,000 sf	$5,189	$4,952	$4,175	$2,123
565	Day Care Center	1,000 sf	$17,098	$16,310	$13,721	$6,887
610	Hospital	1,000 sf	$10,968	$10,470	$8,832	$4,508
620	Nursing Home	1,000 sf	$2,819	$2,689	$2,264	$1,140
	OFFICE:					
710	General Office 50,000 sf or less	1,000 sf	$11,929	$11,386	$9,601	$4,889
	General Office 50,001-100,000 sf	1,000 sf	$10,109	$9,649	$8,137	$4,145
	General Office 100,001-200,000 sf	1,000 sf	$8,555	$8,165	$6,885	$3,504
	General Office 200,001-400,000 sf	1,000 sf	$7,252	$6,922	$5,839	$2,978
	General Office greater than 400,000 sf	1,000 sf	$6,579	$6,280	$5,296	$2,700
720	Medical Office	1,000 sf	$19,141	$18,271	$15,410	$7,857
750	Office Park	1,000 sf	$12,053	$11,506	$9,706	$4,956
760	Research & Development Center	1,000 sf	$6,311	$6,023	$5,080	$2,588
	RETAIL:					
813	Discount Superstore, Free-Standing	1,000 sf	$13,161	$12,557	$10,571	$5,327
815	Discount Store, Free-Standing	1,000 sf	$14,818	$14,137	$11,900	$5,994
816	Hardware/Paint Store	1,000 sf	$8,600	$8,203	$6,897	$3,451
817	Nursery (Garden Center)	1,000 sf	$11,432	$10,905	$9,171	$4,596
818	Nursery (Wholesale)	1,000 sf	$6,549	$6,247	$5,255	$2,634
820	Retail 200,000 gsf or less	1,000 sfgla	$13,788	$13,155	$11,072	$5,575
	Retail 200,001-400,000 gsf	1,000 sfgla	$12,996	$12,400	$10,442	$5,273
	Retail greater than 400,000 gsf	1,000 sfgla	$12,777	$12,192	$10,269	$5,193
848	Tire Store	1,000 sf	$10,494	$10,015	$8,440	$4,280
857	Discount Club	1,000 sf	$10,822	$10,325	$8,691	$4,379
863	Electronics Superstore	1,000 sf	$7,556	$7,207	$6,061	$3,035
880/881	Pharmacy with or without Drive-Thru	1,000 sf	$10,249	$9,776	$8,224	$4,126
890	Furniture Store	1,000 sf	$2,702	$2,579	$2,175	$1,107
944/946	Service Station with or without Car Wash	fuel pos.	$11,018	$10,510	$8,839	$4,428
947	Car Wash, Self-Service	bay	$10,471	$9,990	$8,407	$4,227
	INDUSTRIAL:					
140	Manufacturing	1,000 sf	$2,940	$2,806	$2,366	$1,205
150	Warehouse	1,000 sf	$2,740	$2,616	$2,206	$1,123
151	Mini-Warehouse	1,000 sf	$956	$912	$768	$387

1) Source: Appendix D, Table D-2, V/C ratio of 0.46 (Needs Plan 2040 V/C)
2) Source: Appendix D, Table D-3, V/C ratio of 0.48 (Current county road system V/C)
3) Source: Appendix D, Table D-4, V/C ratio of 0.56 (Needs Plan_Alternative 2040 V/C)
4) Source: Appendix D, Table D-5, V/C ratio of 1.00
5) If there are <46,000 sq ft of ancillary structures, golf course should be charged per 1,000 sq ft. The "per 1,000 sq ft" rate corresponds to the calculated rate for Retail <200,000 sq ft. If >46,000 sq ft, use "per hole" fee.

Needs-Based Fee Analysis

As discussed previously, a needs-based impact fee is derived based on a list of improvements over a certain time period and associated growth over the same time period. As the list of improvements changes, the fee tends to vary. For this update, two different needs-based scenarios were used:

- 2040 Needs Plan Network – developed based on improvements in the County's 2040 Long Range Transportation Plan
- 2040 Needs Plan_Alternative – developed based on only those improvements needed to address deficiencies on county roads in 2040.

For these scenarios, the overall 2040 network volume is similar, but the number and cost of added improvements vary significantly. The following section includes additional details for each scenario.

Demand Component

Under the needs-based approach, the demand component for each land use is also measured in terms of VMT (the product of trip generation, trip length, and percent new trips). Please refer to page 8.

Cost Component

The cost component for the needs-based analysis is based on a set of improvements. The unit cost used to estimate the total cost of these improvements is estimated at $3,769,000 per lane mile, which was previously shown in Table 2. A needs based-fee calculation utilizes the total cost for a set of improvements rather than using a general cost to add capacity. As previously mentioned, for the needs-based fee analysis, two scenarios were created and used to calculate a cost per vehicle-mile of travel:

- 2040 Needs Plan Network
- 2040 Needs Plan Network_Alternative

2040 Needs Plan Network

This scenario is based on the Needs Plan improvements from the County's 2040 Long Range Transportation Plan and calculates the cost per VMT based on the 2040 volumes for county roads in Clay County. As shown in Table 7, this plan includes over 200 new lane miles with an estimated cost of approximately $723 million. The total VMT added represents the change in volume on county roads between the base model year and the 2040 network. The VMT added represents the volume added to all county roads, not just those that were improved. The total cost of improvements was then divided by the total VMT added (through 2040) for all county roads to determine the cost per VMT.

Table 7
Cost per VMT – 2040 LRTP Needs Plan

Item	Figure
Added Lane Miles (2040)[1]	192.60
Cost per Lane Mile[2]	$3,769,000
Total Cost of Improvements[1]	$723,141,446
Total VMT Added (2040)[3]	462,459
Total Cost per VMT[4]	**$1,564**

1) Source: Appendix B, Table B-10
2) Source: Table 2
3) Source: Appendix B, Table B-11
4) Total cost of improvements divided by total VMT added

2040 Needs Plan Network_Alternative

This scenario calculates the cost per VMT based on the 2040 volumes for county roads in Clay County for a different list of improvements. This alternative list of needs was determined based on a review of deficiencies identified along county roads in Clay County according to the 2040 travel-demand model. A 2040 model run was completed which included only the cost feasible plan improvements, which represents the list of improvements in the LRTP that have been prioritized based on available financial resources. This model run resulted in several county road segments being over capacity by 2040. These segments were then used to create the Alternate Needs Plan. As shown in Table 8, this plan includes over 102 new lane miles with an estimated cost of approximately $380 million. The total VMT added represents the change in volume on all county roads between the base model year and the 2040 network, and not the added VMT on just the improved roads. The total cost of improvements was then divided by the total VMT added (through 2040) for all county roads to determine the cost per VMT.

Table 8
Cost per VMT – 2040 LRTP Needs Plan_Alternative

Item	Figure
Added Lane Miles (2040)[1]	101.70
Cost per Lane Mile[2]	$3,769,000
Total Cost of Improvements[1]	$380,050,884
Total VMT Added (2040)[3]	429,705
Total Cost per VMT[4]	**$884**

1) Source: Appendix B, Table B-12
2) Source: Table 2
3) Source: Appendix B, Table B-13
4) Total cost of improvements divided by total VMT added

Existing Deficiencies

The cost per VMT calculated in Tables 7 and 8 does not include VMT related to existing deficiencies on county roads in Clay County. A roadway impact fee charges new development for their impact on the roadway network and only allowed to charge for the portion related to growth. The Northeast Regional Planning Model indicates that a segment of CR 220 (from Knight Boxx Rd to CR 209) is currently over capacity. Therefore, the improvement cost included in the Needs Plan scenarios only reflects a portion of total cost of the improvement. For the 2040 Needs Plan network, the improvement cost for the aforementioned segment of CR 220 was reduced by 1/3rd based on the portion of the volume added related to new growth. For the alternate network, the CR 220 improvement cost was reduced by 1/5th.

Volume Distribution

Table 9 illustrates the differences in volume distribution for the existing system and for the 2040 Needs Plan and 2040 Alternative Needs Plan (as observed in Tables 7 and 8). For both scenarios, the 2040 network volume is just over 3,000,000 vehicles, but the Alternate Needs Plan distributes more volume to the state road system. The alternate plan includes fewer county road improvements and the transportation model addresses this by loading more traffic onto the state road system. While both plans include similar 2040 network volumes, the Needs Plan_Alternative network allows for more congestion.

Table 9
Clay County Volume Distribution Comparison

Item	Existing System		2040 Network		Volume Added
	Volume	V/C	Volume	V/C	
2040 Needs Plan					
County Roads	451,748	0.48	914,207	0.46	**462,459**
State Roads	1,410,733	0.67	2,109,369	0.67	698,636
Total	1,862,481	0.61	3,023,576	0.59	1,161,095
2040 Needs Plan_Alternative					
County Roads	451,748	0.48	881,453	0.56	**429,705**
State Roads	1,410,733	0.67	2,151,695	0.69	740,962
Total	1,862,481	0.61	3,033,148	0.65	1,170,667

Source: Northeast Regional Planning Model v2

Credit Component

The capital improvement credit for a needs-based impact fee is based on the cost of needed improvements and the level of non-impact fee revenue projected to be available for these improvements. This credit represents not only contributions from new development, but also tax revenues from the existing population, which amounts to a larger portion of the credit. A review of the County's Capital Improvement Program (CIP), budget, and discussions with staff identified the following revenue sources:

- Local government infrastructure sales surtax
- 2nd local option fuel tax
- Series 2009 Infrastructure Sales Surtax Revenue Bond

Local Government Infrastructure Sales Surtax

As mentioned previously, in August 2016, Clay County extended their 1% local government infrastructure sales surtax for an additional 20 years (through 2039). Clay County currently uses a portion this revenue source to fund capacity improvements and to retire debt related to road improvement projects. Based on projections in the County CIP, Clay County will dedicate approximately $2.3 million per year to capacity improvements. This does not include the portion related to debt.

2nd Local Option Fuel Tax

In March 2017, Clay County adopted the five-cent 2nd local option fuel tax, which goes into effect January 1, 2018. Proceeds from this fuel tax are not eligible for maintenance improvements and all revenues will be available for capacity expansion improvements. Based

on the current revenue estimates for the 1st LOFT, the five cents of 2nd LOFT will generate approximately $3.7 million per year for the County.

Series 2009 Infrastructure Sales Surtax Revenue Bond

Clay County currently has outstanding debt related to capacity expansion improvements. The CIP indicates approximately $9.0 million of future expenditures that will be debt funded.

As shown in Table 10, future revenues for capacity expansion were estimated using these funding sources and funding levels.

Table 10
Future Revenue Projections

Credit	Annual Funding	Years(4)	Total Revenues(5)
Local Gov't Infrastructure Surtax(1)	$2,300,000	23	$52,900,000
2nd Local Option Fuel Tax(2)	$3,681,280	23	$84,669,000
2009 Bond Issue(3)	-	-	$8,955,000
Total			**$146,524,000**

1) Source: Clay County CIP, annual amount of sales tax funded capacity-expansion improvements
2) Source: Local Government Financial Information Handbook; 2nd LOFT revenue estimated to be the same as the revenue per penny for the 1st local option fuel tax. Excludes portion distributed to the municipalities.
3) Source: Clay County CIP; total amount of future bond funded capacity expansion improvements
4) Timeframe for revenue collection (2018-2040)
5) Annual funding multiplied by years of funding (Item 2)

As shown in Table 11, future revenues for capacity expansion were estimated using these funding sources and estimated funding levels.

Table 11
Needs-Plan Credit Ratio

Credit	Total Cost of Improvements(1)	Total Non-Impact Fee Revenues(2)	Credit Ratio(3)
Needs Plan	$723,141,446	$146,524,000	**20%**
Needs Plan - Alternative	$380,050,884	$146,524,000	**39%**

1) Source: Tables 7 and 8, total cost of improvements
2) Source: Table 9
3) Non-impact fee revenues (Item 2) divided by the cost of improvements (Item 1)

Calculated Roadway Impact Fee Schedule

Similar to the consumption-based analysis, detailed impact fee calculations for each land use are presented in Appendix D, which includes the major land use categories and the impact fees for the individual land uses contained in each land use category.

For clarification purposes, it may be useful to walk through the calculation of an impact fee for one of the land use categories. In the following example, the net impact fee is calculated for the single-family residential detached land use category (ITE LUC 210) using information from the impact fee schedule included in Appendix D, Tables D-6 and D-7. For each land use category, the following equations are utilized to calculate the net impact fee:

Net Impact Fee = Total Impact Cost – Capital Improvement Credit

Where:

Total Impact Cost = ([Trip Rate × Assessable Trip Length × % New Trips] / 2) × (County Roadway Adjustment Factor) × (Total Cost per VMT)

Capital Improvement Credit = Total Impact Cost × Credit Ratio

Many of these inputs are discussed in detail during the example calculation for the consumption-based fee rate (page 5). The inputs exclusive to the needs-based calculations are detailed below for the single-family detached residential land use category (2,000 sq ft):

- *Total Cost per VMT* = cost per vehicle-mile of travel for all improvements in the County's Needs Plan ($1,564); Needs Plan_Alternative ($884)
- *Credit Ratio* = portion of the total needs costs that will be funded with future non-impact fee revenues (20%); Needs Plan_Alternative (39%)

Needs-Based Roadway Impact Fee Calculation

Using these inputs, a net impact fee can be calculated for the single-family residential detached (2,000 sf) land use category as follows:

Needs Plan:

Total Impact Cost = ([7.81 * 6.62 * 1.0] /2) * (0.39) * ($1,564) = **$15,768**

Total Credit = $15,768 * 20% = **$3,154**

Net Impact Fee = $15,768 – $3,154 = **$12,614**

Needs Plan_Alternative:

Total Impact Cost = ([7.81 * 6.62 * 1.0] /2) * (0.39) * ($884) = **$8,912**

Total Credit = $8,912 * 39% = **$3,476**

Net Impact Fee = $8,912 – $3,476 = **$5,436**

Table 12 presents a summary of the calculated impact fee rates for all land uses in the County's impact fee schedule.

Level-of-Service Analysis and Fee Differential by Area

When compared to the fee rates calculated using the consumption-based method, the needs-based fees are much higher. This is due to the level-of-service that is tied to the fee rate calculation. As discussed previously, the consumption-based methodology is based on adopted LOS standards, resulting in a V/C ratio of 1. When the consumption-based fee is adjusted for V/C ratios obtained under the needs-based scenarios (0.46 and 0.56), the fee rates become more comparable. The Needs Plan rates are still significantly higher due to the fact that this plan includes many new road improvements in areas that do not have existing deficiencies. The consumption-based rates are more similar when compared to the Needs Plan_Alternative.

The needs-based improvements result in a shift from the current V/C of 0.48 to 0.46 in 2040 and the needs-based alternative network shifts the current V/C of 0.48 to 0.56 in 2040. An equivalency calculation for the differing methodologies is presented in the following section of this study.

This approach can also be used to differentiate fees by area. For example, some jurisdictions recognize that the congestion levels are worse in urban areas, which reflect a lower LOS. Conversely, rural areas tend to have better LOS and fee levels can be adjusted upward to reflect this improved service.

Table 12
Needs-Based Fee Rates

ITE LUC	Land Use	Unit	Needs[1] V/C 0.46	Needs Alternative[2] V/C 0.56
	RESIDENTIAL:			
210	Single Family (Detached); less than 1,500 sf and very low income	du	$4,442	$1,914
	Single Family (Detached); less than 1,500 sf and low income	du	$6,670	$2,875
	Single Family (Detached); less than 1,500 sf	du	$10,062	$4,336
	Single Family (Detached); 1,500 to 2,499 sf	**du**	**$12,614**	**$5,436**
	Single Family (Detached); 2,500 sf or larger	du	$14,246	$6,140
220	Multi-Family (Apartment)	du	$8,213	$3,539
230	Residential Condominium/Townhouse	du	$7,167	$3,089
240	Mobile Home Park	du	$4,680	$2,017
253	Assisted Living/Congregate Care Facility	du	$1,218	$525
260	Recreational Home/Vehicle	du	$5,104	$2,200
	LODGING:			
310	Hotel	room	$6,350	$2,737
320	Motel	room	$4,590	$1,978
	RECREATION:			
430	Golf Course[3]	1,000 sf	$20,903	$9,009
		hole	$51,954	$22,391
491	Racquet Club	1,000 sf	$16,571	$7,142
	INSTITUTIONS:			
520	Elementary School (Private)	1,000 sf	$12,950	$5,581
522	Middle School (Private)	1,000 sf	$13,011	$5,608
530	High School (Private)	1,000 sf	$12,171	$5,245
540	University (7,500 or fewer students)	student	$2,907	$1,253
550	University (more than 7,500 students)	student	$2,181	$940
560	Place of Worship	1,000 sf	$7,802	$3,362
565	Day Care Center	1,000 sf	$25,989	$11,201
610	Hospital	1,000 sf	$16,442	$7,086
620	Nursing Home	1,000 sf	$4,274	$1,842
	OFFICE:			
710	General Office 50,000 sf or less	1,000 sf	$17,918	$7,722
	General Office 50,001-100,000 sf	1,000 sf	$15,178	$6,542
	General Office 100,001-200,000 sf	1,000 sf	$12,854	$5,540
	General Office 200,001-400,000 sf	1,000 sf	$10,878	$4,688
	General Office greater than 400,000 sf	1,000 sf	$9,872	$4,255
720	Medical Office	1,000 sf	$28,719	$12,378
750	Office Park	1,000 sf	$18,064	$7,785
760	Research & Development Center	1,000 sf	$9,474	$4,083
	RETAIL:			
813	Discount Superstore, Free-Standing	1,000 sf	$19,938	$8,593
815	Discount Store, Free-Standing	1,000 sf	$22,457	$9,678
816	Hardware/Paint Store	1,000 sf	$13,105	$5,648
817	Nursery (Garden Center)	1,000 sf	$17,399	$7,499
818	Nursery (Wholesale)	1,000 sf	$9,965	$4,294
820	Retail 200,000 gsf or less	1,000 sfgla	$20,903	$9,009
	Retail 200,001-400,000 gsf	1,000 sfgla	$19,654	$8,470
	Retail greater than 400,000 gsf	1,000 sfgla	$19,302	$8,319
848	Tire Store	1,000 sf	$15,815	$6,816
857	Discount Club	1,000 sf	$16,399	$7,067
863	Electronics Superstore	1,000 sf	$11,508	$4,959
880/881	Pharmacy with or without Drive-Thru	1,000 sf	$15,583	$6,716
890	Furniture Store	1,000 sf	$4,060	$1,749
944/946	Service Station with or without Car Wash	fuel pos.	$16,774	$7,230
947	Car Wash, Self-Service	bay	$15,892	$6,849
	INDUSTRIAL:			
140	Manufacturing	1,000 sf	$4,416	$1,903
150	Warehouse	1,000 sf	$4,115	$1,774
151	Mini-Warehouse	1,000 sf	$1,447	$624

1) Source: Appendix D, Table D-6
2) Source: Appendix D, Table D-7
3) If there are <46,000 sq ft of ancillary structures, golf course should be charged per 1,000 sq ft. The "per 1,000 sq ft" rate corresponds to the calculated rate for Retail <200,000 sq ft. If >46,000 sq ft, use "per hole" fee.

Summary of Calculated Roadway Impact Fee Rates

This section provides a comparison of the calculated impact fee rates using the consumption-based approach (multiple V/C ratio scenarios) and the two needs-based scenarios. Table 13 summarizes the full calculated rates for the single family (detached) land use (2,000 sf).

Table 13
Comparison of Calculated Roadway Impact Fee Rates – Single Family

Fee Analysis	V/C Ratio 0.46	V/C Ratio 0.48	V/C Ratio 0.56	V/C Ratio 1.00
Consumption-Based[1]	$8,417	$8,035	$6,778	$3,461
Needs-Based[2]	$12,614	-	-	-
Needs-Based_Alternative[3]	-	-	$5,436	-

1) Source: Table 6
2) Source: Table 11
3) Source: Table 11

Roadway Impact Fee Rate Comparison

A comparison of calculated fee schedule to the current adopted fee by land use is presented in Table 14 for select land uses.

A summary of the calculated impact fee rates for all land uses is presented in Appendix D, Tables D-2 through D-7.

Table 14
Roadway Impact Fee Comparison

Land Use	Unit[2]	Clay County								St. Johns County[10]	Putnam County[11]	Alachua County[12]	Hernando County[13]	Marion County[14]
		Calculated						Existing[9]						
		Consumption V/C 0.46[3]	Consumption V/C 0.48[4]	Consumption V/C 0.56[5]	Consumption V/C 1.00[6]	Needs[7]	Needs_Alt.[8]	District 2	District 3					
Date of Last Update		**2016**	**2016**	**2016**	**2016**	**2016**	**2016**	2008	2008	2011	-	2007	2013	2015
Assessed Portion of Calculated[1]		**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	100%	100%	100%	0%	85%	22%	11-20%
Residential:														
Single Family Detached (2,000 sq ft)	du	**$8,417**	**$8,035**	**$6,778**	**$3,461**	**$12,614**	**$5,436**	$4,341	$5,814	$4,887	$2,290	$5,372	$1,269	$1,397
Non-Residential:														
Manufacturing/Light Industrial	1,000 sf	**$2,940**	**$2,806**	**$2,366**	**$1,205**	**$4,416**	**$1,903**	$1,839	$2,463	$1,688	$1,338	$2,857	$806	$428
Office (50,000 sq ft)	1,000 sf	**$11,929**	**$11,386**	**$9,601**	**$4,889**	**$17,918**	**$7,722**	$2,824	$3,782	$2,364	$2,683	$4,275	$1,516	$676
Retail (125,000 sq ft)	1,000 sf	**$13,788**	**$13,155**	**$11,072**	**$5,575**	**$20,903**	**$9,009**	$3,698	$4,953	$4,188	$1,280	$6,062	$1,884	$1,014
Bank	1,000 sf	**$13,788**	**$13,155**	**$11,072**	**$5,575**	**$20,903**	**$9,009**	$8,429	$11,290	$10,534	$4,150	$13,409	$4,257	$2,260
Fast Food w/Drive-Thru	1,000 sf	**$13,788**	**$13,155**	**$11,072**	**$5,575**	**$20,903**	**$9,009**	$8,901	$11,921	$10,074	$4,150	$17,293	$17,397	$2,803

1) Represents the portion of the maximum calculated fee for each respective county that is actually charged. Fees may have been lowered/increased through annual indexing or policy discounts. Does not account for moratoriums/suspensions
2) du = dwelling unit
3) Source: Appendix D, Table D-2
4) Source: Appendix D, Table D-3
5) Source: Appendix D, Table D-4
6) Source: Appendix D, Table D-5
7) Source: Appendix D, Table D-6
8) Source: Appendix D, Table D-7
9) Source: Clay County Transportation Planning Department. Fees shown are currently suspended
10) Source: St. Johns County Growth Management Department. Fee rate for "Light Industrial" is shown as s proxy for "Manufacturing". Fees shown include recent indexing
11) Source: Putnam County Planning & Development Services. Fee rate for "General Light Industrial" is shown as s proxy for "Manufacturing". Fees shown are currently suspended
12) Source: Alachua County Growth Management and Building Department. Rural Residential fee is shown
13) Source: Hernando County Development Department
14) Source: Marion County Growth Services & Planning Department. Fee rate for "Quality Restaurant" is shown as a proxy for "Fast Food"

Fee Discounts & Economic Growth Model Application

In addition to calculating the roadway impact fee levels, this study also includes an economic growth strategy approach to impact fee calculations, which takes into account the existing development's ability to absorb new growth and calculates the levels of possible policy discounts without reducing the level-of-service used in the full roadway impact fee calculations.

As presented in Table 10 and Appendix C, in addition to impact fees, other revenue sources such as fuel tax and Local Government Infrastructure Surtax are also being used to fund the countywide transportation system. In terms of the economic growth calculations, it is important to note the following:

- As discussed previously, consumption-based impact fees that are based on either the adopted LOS standard or a service level that is lower than achieved LOS do not generate sufficient revenues to maintain the existing conditions.

- The economic growth strategy calculations are based on the future estimated fuel and sales tax funding toward countywide transportation capital capacity projects. The calculations exclude any funding dedicated toward paying the debt service since the dollar amount cannot be available for absorbing the growth. If other revenue sources become available, these calculations will need to be revised.

- Based on the socio-economic data and projections obtained from the NERPM v2, an average annual growth rate of 1.75 percent was calculated for Clay County between 2017 and 2040. This growth projection is used in the calculations associated with the economic growth strategy.

- As previously presented in Table 10, the County is projected to use $52.9 million of sales tax revenues and $84.7 million of fuel tax revenues, for a total of $137.6 million of non-impact fee dollars toward capacity expansion of county roads over the next 23 years. This suggests an annual amount of almost $6 million of tax revenues being used toward roadway capacity. Although impact fee calculations already account for the portion of this revenue that is generated by new development, a larger portion of the revenue is generated by existing population and can be treated as a "buy-down"

fund. In other words, as long as the County limits the buy-down amount to approximately $6 million per year, the equity requirements of impact fee will be met.

- In addition, approximately 75 to 85 percent of impact fee revenues are generated from residential development. Maintaining residential fees at reasonable levels allows the County to provide deeper discounts for the non-residential land uses that are supported by the County's economic development goals. An example of this would be the Qualified Targeted Industries (QTI), which tend to bring jobs with higher wages.

- Given that any impact fee discount results in revenue loss, it is recommended that the discounts are applied to select land uses consistent with the County's Comprehensive Plan and economic development goals and policies. Examples would be high wage creating jobs, industries/sectors important to well-being of the residents (such as education, safety, etc.).

Table 15 provides examples of possible discount options at V/C ratio of 0.56 and 1.0 (adopted LOS standard). As show, under the V/C ratio of 0.56, the County is able to discount most land uses by 15 percent and offer higher discount levels for select land uses as well as for QTI. These discount levels are estimated to require a buy-down amount of less than $1 million under the V/C ratio of 1 and less than $1.5 million under the V/C ratio of 0.56. Non-impact fee funding of approximately $6 million dedicated to transportation capacity easily accommodates these reductions.

It is important that the County track the impact fee discount amounts and compare them to the non-impact fee capacity funding programmed in the five-year Capital Improvement Plan to ensure that the discounted amounts do not exceed funding provided by other sources.

As mentioned previously, the level of discount is more of a policy decision and could be at any level between no discounts and the maximum level of $6 million per year (or any amount the County dedicates from non-impact fee revenue sources). Any additional discounts would either need to be applied to all land uses or needed to be bought down with the General Fund or another revenue source.

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Table 15
Fee Discounts & Economic Growth Model Fee Comparison

ITE LUC	Land Use	Unit	Consumption-Based Fee, V/C 0.56					Consumption-Based Fee, V/C 1.00					Clay County[7]		St. John's County[8]
			Full Calculated Rate[1]	Base/ Institutional Discount[2]	Base/Inst. Discounted Fee Rate[3]	QTI[4] Discount	QTI Fee Rate[5]	Full Calculated Rate[6]	Base/ Institutional Discount[2]	Base/Inst. Discounted Fee Rate[3]	QTI[4] Discount	QTI Fee Rate[5]	Current Fee District 2	Current Fee District 3	
	RESIDENTIAL:														
210	Single Family (Detached); less than 1,500 sf & Very low income	du	$2,382	15%	$2,025	-	-	$1,214	0%	$1,214	-	-	$4,341	$5,814	$3,951
	Single Family (Detached); less than 1,500 sf & low income	du	$3,578	15%	$3,041	-	-	$1,824	0%	$1,824	-	-	$4,341	$5,814	$3,951
	Single Family (Detached); less than 1,500 sf	du	$5,410	15%	$4,599	-	-	$2,764	0%	$2,764	-	-	$4,341	$5,814	$3,951
	Single Family (Detached); 1,500 to 2,499 sf	**du**	**$6,778**	**15%**	**$5,761**	**-**	**-**	**$3,461**	**0%**	**$3,461**	-	-	**$4,341**	**$5,814**	**$4,887**
	Single Family (Detached); 2,500 sf or larger	du	$7,656	15%	$6,508	-	-	$3,910	0%	$3,910	-	-	$4,341	$5,814	$4,887
220	Multi-Family (Apartment)	du	$4,401	15%	$3,741	-	-	$2,242	0%	$2,242	-	-	$3,048	$4,082	Res Rate
230	Residential Condominium/Townhouse	du	$3,837	15%	$3,261	-	-	$1,952	0%	$1,952	-	-	$3,048	$4,082	Res Rate
240	Mobile Home Park	du	$2,504	15%	$2,128	-	-	$1,273	0%	$1,273	-	-	$2,658	$3,560	-
253	Assisted Living/Congregate Care Facility	du	$651	15%	$553	-	-	$330	0%	$330	-	-	-	-	
260	Recreational Home/Vehicle	du	$2,740	15%	$2,329	-	-	$1,397	0%	$1,397	-	-	$1,433	$1,920	$15,219
	LODGING:														
310	Hotel	room	$3,407	15%	$2,896	-	-	$1,737	0%	$1,737	-	-	$1,878	$2,515	$3,037
320	Motel	room	$2,453	15%	$2,085	-	-	$1,245	0%	$1,245	-	-	$1,878	$2,515	$3,037
	RECREATION:														
430	Golf Course[9]	1,000 sf	$11,072	15%	$9,411	-	-	$5,575	0%	$5,575	-	-	$9,781	$13,100	$611
		hole	$27,915	15%	$23,728	-	-	$14,252	0%	$14,252	-	-	$9,781	$13,100	$611
491	Racquet Club	1,000 sf	$8,889	15%	$7,556	-	-	$4,531	0%	$4,531	-	-	$4,616	$6,182	-
	INSTITUTIONS:														
520	Elementary School (Private)	1,000 sf	$6,923	75%	$1,731	-	-	$3,518	50%	$1,759	-	-	$798	$1,056	$1,144
522	Middle School (Private)	1,000 sf	$6,960	75%	$1,740	-	-	$3,538	50%	$1,769	-	-	-	-	-
530	High School (Private)	1,000 sf	$6,513	75%	$1,628	-	-	$3,313	50%	$1,657	-	-	$1,500	$2,009	$955
540	University (7,500 or fewer students)	student	$1,563	15%	$1,329	-	-	$798	0%	$798	-	-	-	-	$2,038
550	University (more than 7,500 students)	student	$1,167	15%	$992	-	-	$594	0%	$594	-	-	-	-	$2,038
560	Place of Worship	1,000 sf	$4,175	15%	$3,549	-	-	$2,123	0%	$2,123	-	-	$2,339	$3,132	-
565	Day Care Center	1,000 sf	$13,721	75%	$3,430	-	-	$6,887	50%	$3,444	-	-	$1,488	$1,992	-
610	Hospital	1,000 sf	$8,832	15%	$7,507	70%	$2,252	$4,508	0%	$4,508	55%	$2,029	$3,595	$4,815	$2,078
620	Nursing Home	1,000 sf	$2,264	15%	$1,924	50%	$962	$1,140	0%	$1,140	15%	$969	$3,825	$5,123	$969
	OFFICE:														
710	General Office 50,000 sf or less	1,000 sf	$9,601	15%	$8,161	70%	$2,448	$4,889	15%	$4,156	45%	$2,286	$2,824	$3,782	$2,364
	General Office 50,001-100,000 sf	1,000 sf	$8,137	15%	$6,916	65%	$2,421	$4,145	15%	$3,523	35%	$2,290	$2,824	$3,782	$2,364
	General Office 100,001-200,000 sf	1,000 sf	$6,885	15%	$5,852	60%	$2,341	$3,504	15%	$2,978	30%	$2,085	$2,824	$3,782	$2,178
	General Office 200,001-400,000 sf	1,000 sf	$5,839	15%	$4,963	55%	$2,233	$2,978	15%	$2,531	25%	$1,898	$2,824	$3,782	$2,280
	General Office greater than 400,000 sf	1,000 sf	$5,296	15%	$4,502	50%	$2,251	$2,700	15%	$2,295	25%	$1,721	$2,824	$3,782	$2,280
720	Medical Office	1,000 sf	$15,410	15%	$13,099	55%	$5,894	$7,857	15%	$6,678	25%	$5,009	$3,241	$4,341	$5,963
750	Office Park	1,000 sf	$9,706	15%	$8,250	50%	$4,125	$4,956	0%	$4,956	25%	$3,717	$3,417	$4,577	Office Rate
760	Research & Development Center	1,000 sf	$5,080	15%	$4,318	50%	$2,159	$2,588	0%	$2,588	25%	$1,941	$2,427	$3,250	Office Rate
	RETAIL:														
813	Discount Superstore, Free-Standing	1,000 sf	$10,571	15%	$8,985	-	-	$5,327	0%	$5,327	-	-	$6,357	$8,514	Retail Rate
815	Discount Store, Free-Standing	1,000 sf	$11,900	15%	$10,115	-	-	$5,994	0%	$5,994	-	-	$9,648	$12,922	Retail Rate
816	Hardware/Paint Store	1,000 sf	$6,897	15%	$5,862	-	-	$3,451	0%	$3,451	-	-	$4,417	$5,916	Retail Rate
817	Nursery (Garden Center)	1,000 sf	$9,171	15%	$7,795	-	-	$4,596	0%	$4,596	-	-	$2,589	$3,468	Retail Rate
818	Nursery (Wholesale)	1,000 sf	$5,255	15%	$4,467	-	-	$2,634	0%	$2,634	-	-	$2,799	$3,748	Retail Rate
820	Retail 200,000 gsf or less	1,000 sfgla	$11,072	15%	$9,411	-	-	$5,575	0%	$5,575	-	-	$3,698	$4,953	$4,188
	Retail 200,001-400,000 gsf	1,000 sfgla	$10,442	15%	$8,876	-	-	$5,273	0%	$5,273	-	-	$3,698	$4,953	$5,604
	Retail greater than 400,000 gsf	1,000 sfgla	$10,269	15%	$8,729	-	-	$5,193	0%	$5,193	-	-	$3,698	$4,953	$6,516

Table 15 (continued)
Fee Discounts & Economic Growth Model Fee Comparison

ITE LUC	Land Use	Unit	Consumption-Based Fee, V/C 0.56					Consumption-Based Fee, V/C 1.00					Clay County[7]		St. John's County[8]
			Full Calculated Rate[1]	Base/ Institutional Discount[2]	Base/Inst. Discounted Fee Rate[3]	QTI[4] Discount	QTI Fee Rate[5]	Full Calculated Rate[6]	Base/ Institutional Discount[2]	Base/Inst. Discounted Fee Rate[3]	QTI[4] Discount	QTI Fee Rate[5]	Current Fee District 2	Current Fee District 3	
	RETAIL:														
848	Tire Store	1,000 sf	$8,440	15%	$7,174	-	-	$4,280	0%	$4,280	-	-	$2,682	$3,592	Retail Rate
857	Discount Club	1,000 sf	$8,691	15%	$7,387	-	-	$4,379	0%	$4,379	-	-	$9,599	$12,856	Retail Rate
863	Electronics Superstore	1,000 sf	$6,061	15%	$5,152	-	-	$3,035	0%	$3,035	-	-	$10,343	$13,853	Retail Rate
880/881	Pharmacy with or w/o Drive-Thru	1,000 sf	$8,224	15%	$6,990	-	-	$4,126	0%	$4,126	-	-	$6,327	$8,473	$2,864
890	Furniture Store	1,000 sf	$2,175	15%	$1,849	-	-	$1,107	0%	$1,107	-	-	$1,452	$1,945	-
944/946	Service Station with or without Car Wash	fuel pos.	$8,839	15%	$7,513	-	-	$4,428	0%	$4,428	-	-	$3,024	$4,050	$2,644
947	Car Wash, Self-Service	bay	$8,407	15%	$7,146	-	-	$4,227	0%	$4,227	-	-	-	-	Retail Rate
	INDUSTRIAL:														
140	Manufacturing	1,000 sf	$2,366	15%	$2,011	20%	$1,609	$1,205	0%	$1,205	15%	$1,024	$1,839	$2,463	$1,688
150	Warehouse	1,000 sf	$2,206	15%	$1,875	55%	$844	$1,123	0%	$1,123	15%	$955	$2,387	$3,198	$862
151	Mini-Warehouse	1,000 sf	$768	15%	$653	0%	$653	$387	0%	$387	0%	$387	$722	$967	$605

1) Source: Appendix D, Table D-4
2) Base/Institutional discount percentage
3) Full calculated rate multiplied by the base/institutional discount (Item 2)
4) Qualified targeted industries discount percentage
5) Base/institutional discount fee rate (Item 3) multiplied by the QTI discount (Item 4)
6) Source: Appendix D, Table D-5
7) Source: Clay County Transportation Planning Department; cells highlighted in peach suggest a calculation error in the previous technical study. As such, comparison to current calculated fees is not possible.
8) Source: St. John's County Growth Management Department
9) If there are <46,000 sq ft of ancillary structures, golf course should be charged per 1,000 sq ft. The "per 1,000 sq ft" rate corresponds to the calculated rate for Retail <200,000 sq ft. If >46,000 sq ft, charge per hole

Roadway Impact Fee Benefit Districts

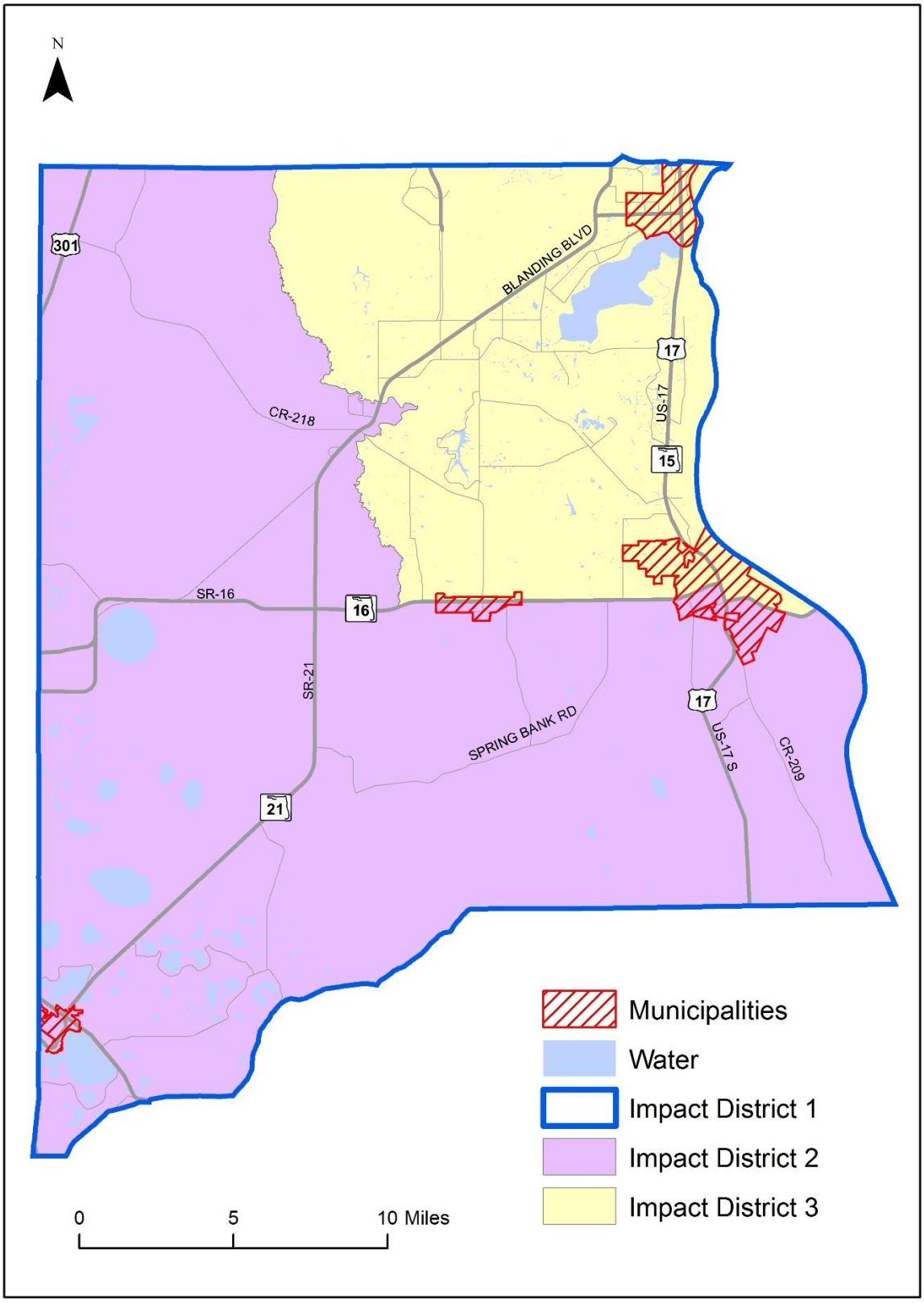
Currently, Clay County has three established roadway impact fee benefit districts. Benefit districts dictate where impact fee revenues can be spent to ensure that fee payers receive the associated benefit. Typically, boundaries for benefit districts are based on land uses, growth rates, major roadway boundaries, and major geographical/environmental boundaries. Roadway impact fee revenues collected within each district are deposited into three separate trust accounts upon receipt. These revenues can only be used for county roadway capacity expansion improvements within Clay County.

Map 1 illustrates the current Clay County Roadway Impact Fee Benefit Districts. District 1 is a countywide benefit district, and based on previous analysis conducted by the County, it includes all arterial roadways in Clay County, which are typically regional in nature and serve the entire County. District 2 corresponds to all collector roads in southwest Clay County and District 3 corresponds to all collector roads in northeast Clay County.

Based on a review of the current districts, the north and south forks of the Black Creek provide a definite vertical environmental boundary between the Districts 2 and 3 while SR 16 creates a reasonable horizontal boundary between these districts.

It is recommended that the County include the boundaries and definitions of types of roadways included in each district in the impact fee ordinance and monitor the effectiveness of the three-district layout with regard to impact fee collection distributions, planned projects, and future travel patterns.

Map 1 – Roadway Impact Fee Benefit Districts



APPENDIX A
Demand Component Calculations

Appendix A: Demand Component

This appendix presents the detailed calculations for the demand component of the roadway impact fee update.

County Roadway Adjustment Factor

Table A-1 presents the county roadway adjustment factor used in the calculation of the roadway impact fee. This variable is based on data from the Northeast Regional Planning Model, specifically the 2040 projected vehicle miles of travel, accounting for roadway improvements included in the 2040 Cost Feasible Long Range Transportation Plan. The county roadway adjustment factor is used to apportion the VMT for each land use to the portion associated with county roadways.

Table A-1
County Roadway Adjustment Factor

Jurisdiction	VMT (2040)	% VMT
County Facilities	2,419,930	**38.6%**
State Facilities	3,846,928	61.4%
Total	**6,266,859**	**100.0%**

Source: Northeast Regional Planning Model (NERPM) v2

Single Family Residential Trip Generation Rate Tiering

As part of this study, the single family residential trip generation rate tiering was included to reflect a three-tier analysis to ensure equity by the size of a home. To facilitate this, an analysis was completed on the comparative relationship between housing size and household travel behavior. This analysis utilized data from the 2009 National Household Travel Survey (NHTS) and the 2015 American Housing Survey (AHS) to examine overall trip-making characteristics of households in the United States.

Table A-2 presents the trip characteristics being utilized in the proposed mobility fee schedule for the single family (detached) land use. The 2009 NHTS database was used to assess average annual household vehicle miles of travel for various annual household income levels. In addition, the 2015 AHS database was used to compare median annual family/household incomes with housing unit size. It is important to recognize that the use of the income variable in each of these databases is completed simply to provide a convenient linking mechanism between household VMT from the NHTS and housing unit size from the AHS.

Table A-2
Calculated Single Family Trip Characteristics

Calculated Values Excluding Tiering	Trip Rate	Assessable Trip Length	Daily VMT
Single Family (Detached)	7.81	6.62	51.70

Source: Florida Studies for LUC 210 included in this Appendix (Page A-5)

The results of the NHTS and AHS analyses are included in Tables A-3 and A-4. First, the data shown in Table A-3 presents the average income in the U.S. for families/households living in the three housing tiers. As shown, the average income for housing units between 1,500 and 2,499 square feet in size ($70,371) is higher than the overall average income for the U.S. ($63,584). Table A-4 presents the median household income levels for low and very low income levels in Clay County. These levels were used to create additional trip generation rate tiers for smaller homes (less than 1,500 sq ft).

Table A-3
Annual Income by Housing Size

2015 AHS Average Income Data by Housing Size (Single Family, detached)	Annual Income[(1)]
Less than 1,500 sf	$48,880
1,500 to 2,499 sf	$70,371
2,500 sf or more	$87,897
Average of All Houses	$63,584

Source: American Housing Survey for the United State in 2013
1) Weighted average of annual income for each tier

Table A-4
Annual Income by Housing Size

Clay County SHIP Definitions	
Median Income	$64,400
Low Income[(1)]	$51,500
Very Low Income[(2)]	$32,200

Source: Florida Housing Finance Corporation, 2016 Income Limits; SHIP (4 person household)
1) Defined as 80% of the median income
2) Defined as 50% of the median income

To calculate a corresponding trip rate for the new tiers it was necessary to rely on comparative ratios. As an example, consider the $44,880 annual income category. First, it was determined that the average annual household VMT for this income level is 20,736 miles.

This figure was then compared to the overall average annual VMT per household in the U.S. and normalized to the average of the $63,584 (24,496 miles) category to derive a ratio of 0.798, as shown in Table A-5.

Table A-5
NHTS Annual VMT by Income Category

2009 NHTS Travel Data by Annual HH Income	Annual VMT/HH	Days	Daily VMT	Ratio to Mean	Normalized to 1.061
Average of $16,100	9,145	365	25.05	0.373	0.352
Average of $25,750	13,748	365	37.67	0.561	0.529
Average of $48,880	20,736	365	56.81	0.847	0.798
Total (All Homes)	24,496	365	67.11	1.000	
Average of $70,371	25,995	365	71.22	1.061	1.000
Average of $87,897	29,347	365	80.40	1.198	1.129

Source: 2009 National Household Travel Survey Database, Federal Highway Administration

Table A-6
Trip Generation Rate by Single Family Land Use Tier

Estimation of Trip Rate by Tier	Trip Rate[(1)]	Assessable Trip Length[(2)]	Daily VMT[(3)]	Ratio to Mean[(4)]
Single Family (Detached)				
Less than 1,500 sf & Very Low Income	**2.75**	6.62	18.20	0.352
Less than 1,500 sf & Low Income	**4.13**	6.62	27.35	0.529
Less than 1,500 sf	**6.23**	6.62	41.26	0.798
1,500 to 2,499 sf	**7.81**	6.62	51.70	1.000
2,500 sf or larger	**8.82**	6.62	58.37	1.129

1) Daily VMT (Item 3) divided by assessable trip length (Item 2) for each tiered single family land use category
2) Source: Table A-2
3) Ratio to mean (Item 4) multiplied by total daily VMT for the 1,500 to 2,499 sf tier for each tiered single family land use category
4) Source: Table A-5

Table A-7 illustrates the impact that the incorporation of the trip generation rate tiers for the single family (detached) land use have on the County's calculated road impact fee schedule.

Table A-7
Net Road Impact Fee by Single Family Land Use Tier

Impact of Tiering on Fee Schedule	Trip Rate[1]	Assessable Trip Length	Daily VMT	Net Fee[2]
Single Family (Detached)				
Less than 1,500 sf & Very Low Income	**2.75**	6.62	18.20	**$1,214**
Less than 1,500 sf & Low Income	**4.13**	6.62	27.35	**$1,824**
Less than 1,500 sf	**6.23**	6.62	41.26	**$2,764**
1,500 to 2,499 sf	**7.81**	6.62	51.70	**$3,461**
2,500 sf or larger	**8.82**	6.62	58.37	**$3,910**

1) Source: Table A-6 (Item 1)
2) Source: Table A-2
3) Source: Table A-6 (Item 3)
4) Source: Appendix D, Table D-5

Florida Studies Trip Characteristics Database

The Florida Studies Trip Characteristics Database includes over 200 studies on 40 different residential and non-residential land uses collected over the last 25 years. Data from these studies include trip generation, trip length, and percent new trips for each land use. This information has been used in the development of impact fees and the creation of land use plan category trip characteristics for communities throughout Florida and the U.S.

Tindale Oliver estimates trip generation rates for all land uses in a roadway impact fee schedule using data from studies in the Florida Studies Database and the Institute of Transportation Engineers' (ITE) *Trip Generation* reference report (9th edition). In instances, when both ITE *Trip Generation* reference report (9th edition) and Florida Studies trip generation rate (TGR) data are available for a particular land use, the data is typically blended to increase the sample size and provide a more valid estimate of the average number of trips generated per unit of development. If no Florida Studies data is available, only TGR data from the ITE reference report is used in the fee calculation.

The trip generation rate for each respective land use is calculated using machine counts that record daily traffic into and out of the site studied. The traffic count hoses are set at entrances to residential subdivisions for the residential land uses and at all access points for non-residential land uses.

The trip length information is obtained through origin-destination surveys that ask respondents where they came from prior to arriving at the site and where they intended to

go after leaving the site. The results of these surveys were used to estimate average trip length by land use.

The percent new trip variable is based on assigning each trip collected through the origin-destination survey process a trip type (primary, secondary, diverted, and captured). The percent new trip variable is then calculated as 1 minus the percentage of trips that are captured.

Mini-Warehouse (ITE LUC 151)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Orange Co, FL	89.6	-	-	-	1.23	-	-	-	-	Orange County
Orange Co, FL	84.7	-	-	-	1.39	-	-	-	-	Orange County
Orange Co, FL	93.0	-	-	-	1.51	-	-	-	-	Orange County
Orange Co, FL	107.0	-	-	-	1.45	-	-	-	-	Orange County
Orange Co, FL	77.0	-	-	-	2.18	-	-	-	-	Orange County
Orange Co, FL	93.7	-	-	-	1.15	-	-	-	-	Orange County
Total Size	545.0	6					**Average Trip Length:**	**n/a**		
ITE	784.0	14					**Weighted Average Trip Length:**	**n/a**		
Blended total	1,329.0						Weighted Percent New Trip Average:	-		

Weighted Average Trip Generation Rate:	1.47
ITE Average Trip Generation Rate:	2.50
Blend of FL Studies and ITE Average Trip Generation Rate:	**2.08**

Single-Family Detached Housing (ITE LUC 210)

Location	Size / Units	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Gwinnett Co, GA	-	12/13-18/92	-	-	5.80	-	5.40	N/A	31.32	Street Smarts
Gwinnett Co, GA	-	12/13-18/92	-	-	5.40	-	6.10	N/A	32.94	Street Smarts
Sarasota Co, FL	76	Jun-93	70	70	10.03	-	6.00	N/A	60.18	Sarasota County
Sarasota Co, FL	79	Jun-93	86	86	9.77	-	4.40	N/A	42.99	Sarasota County
Sarasota Co, FL	135	Jun-93	75	75	8.05	-	5.90	N/A	47.50	Sarasota County
Sarasota Co, FL	152	Jun-93	63	63	8.55	-	7.30	N/A	62.42	Sarasota County
Sarasota Co, FL	193	Jun-93	123	123	6.85	-	4.60	N/A	31.51	Sarasota County
Sarasota Co, FL	97	Jun-93	33	33	13.20	-	3.00	N/A	39.60	Sarasota County
Sarasota Co, FL	282	Jun-93	146	146	6.61	-	8.40	N/A	55.52	Sarasota County
Sarasota Co, FL	393	Jun-93	207	207	7.76	-	5.40	N/A	41.90	Sarasota County
Hernando Co, FL	76	May-96	148	148	10.01	9a-6p	4.85	N/A	48.55	Tindale Oliver
Hernando Co, FL	128	May-96	205	205	8.17	9a-6p	6.03	N/A	49.27	Tindale Oliver
Hernando Co, FL	232	May-96	182	182	7.24	9a-6p	5.04	N/A	36.49	Tindale Oliver
Hernando Co, FL	301	May-96	264	264	8.93	9a-6p	3.28	N/A	29.29	Tindale Oliver
Charlotte Co, FL	135	Oct-97	230	-	5.30	9a-5p	7.90	N/A	41.87	Tindale Oliver
Charlotte Co, FL	142	Oct-97	245	-	5.20	9a-5p	4.10	N/A	21.32	Tindale Oliver
Charlotte Co, FL	150	Oct-97	160	-	5.00	9a-5p	10.80	N/A	54.00	Tindale Oliver
Charlotte Co, FL	215	Oct-97	158	-	7.60	9a-5p	4.60	N/A	34.96	Tindale Oliver
Charlotte Co, FL	257	Oct-97	225	-	7.60	9a-5p	7.40	N/A	56.24	Tindale Oliver
Charlotte Co, FL	345	Oct-97	161	-	7.00	9a-5p	6.60	N/A	46.20	Tindale Oliver
Charlotte Co, FL	368	Oct-97	152	-	6.60	9a-5p	5.70	N/A	37.62	Tindale Oliver
Charlotte Co, FL	383	Oct-97	516	-	8.40	9a-5p	5.00	N/A	42.00	Tindale Oliver
Charlotte Co, FL	441	Oct-97	195	-	8.20	9a-5p	4.70	N/A	38.54	Tindale Oliver
Charlotte Co, FL	1,169	Oct-97	348	-	6.10	9a-5p	8.00	N/A	48.80	Tindale Oliver
Collier Co, FL	90	Dec-99	91	-	12.80	8a-6p	11.40	N/A	145.92	Tindale Oliver
Collier Co, FL	400	Dec-99	389	-	7.80	8a-6p	6.40	N/A	49.92	Tindale Oliver
Lake Co, FL	49	Apr-02	170	-	6.70	7a-6p	10.20	N/A	68.34	Tindale Oliver
Lake Co, FL	52	Apr-02	212	-	10.00	7a-6p	7.60	N/A	76.00	Tindale Oliver
Lake Co, FL	126	Apr-02	217	-	8.50	7a-6p	8.30	N/A	70.55	Tindale Oliver
Pasco Co, FL	55	Apr-02	133	-	6.80	8a-6p	8.12	N/A	55.22	Tindale Oliver
Pasco Co, FL	60	Apr-02	106	-	7.73	8a-6p	8.75	N/A	67.64	Tindale Oliver
Pasco Co, FL	70	Apr-02	188	-	7.80	8a-6p	6.03	N/A	47.03	Tindale Oliver
Pasco Co, FL	74	Apr-02	188	-	8.18	8a-6p	5.95	N/A	48.67	Tindale Oliver
Pasco Co, FL	189	Apr-02	261	-	7.46	8a-6p	8.99	N/A	67.07	Tindale Oliver
Marion Co, FL	102	Apr-02	167	-	8.02	7a-6p	5.10	N/A	40.90	Kimley-Horn & Associates
Marion Co, FL	105	Apr-02	169	-	7.23	7a-6p	7.22	N/A	52.20	Kimley-Horn & Associates
Marion Co, FL	124	Apr-02	170	-	6.04	7a-6p	7.29	N/A	44.03	Kimley-Horn & Associates
Marion Co, FL	132	Apr-02	171	-	7.87	7a-6p	7.00	N/A	55.09	Kimley-Horn & Associates
Marion Co, FL	133	Apr-02	209	-	8.04	7a-6p	4.92	N/A	39.56	Kimley-Horn & Associates
Citrus Co, FL	111	Oct-03	273	-	8.66	7a-6p	7.70	N/A	66.68	Tindale Oliver
Citrus Co, FL	231	Oct-03	155	-	5.71	7a-6p	4.82	N/A	27.52	Tindale Oliver
Citrus Co, FL	306	Oct-03	146	-	8.40	7a-6p	3.94	N/A	33.10	Tindale Oliver
Citrus Co, FL	364	Oct-03	345	-	7.20	7a-6p	9.14	N/A	65.81	Tindale Oliver
Citrus Co, FL	374	Oct-03	248	-	12.30	7a-6p	6.88	N/A	84.62	Tindale Oliver
Lake Co, FL	42	Dec-06	122	-	11.26	-	5.56	N/A	62.61	Tindale Oliver
Lake Co, FL	51	Dec-06	346	-	18.22	-	9.46	N/A	172.36	Tindale Oliver
Lake Co, FL	59	Dec-06	144	-	12.07	-	10.79	N/A	130.24	Tindale Oliver
Lake Co, FL	90	Dec-06	194	-	9.12	-	5.78	N/A	52.71	Tindale Oliver
Lake Co, FL	239	Dec-06	385	-	7.58	-	8.93	N/A	67.69	Tindale Oliver
Hernando Co, FL	232	Apr-07	516	-	8.02	7a-6p	8.16	N/A	65.44	Tindale Oliver
Hernando Co, FL	95	Apr-07	256	-	8.08	7a-6p	5.88	N/A	47.51	Tindale Oliver
Hernando Co, FL	90	Apr-07	338	-	7.13	7a-6p	5.86	N/A	41.78	Tindale Oliver
Hernando Co, FL	58	Apr-07	153	-	6.16	7a-6p	8.39	N/A	51.68	Tindale Oliver
Collier Co, FL	74	Mar-08	503	-	12.81	7a-6p	3.05	N/A	39.07	Tindale Oliver
Collier Co, FL	97	Mar-08	512	-	8.78	7a-6p	11.29	N/A	99.13	Tindale Oliver
Collier Co, FL	315	Mar-08	1,347	-	6.97	7a-6p	6.55	N/A	45.65	Tindale Oliver
Collier Co, FL	42	Mar-08	314	-	9.55	7a-6p	10.98	N/A	104.86	Tindale Oliver
Total Size	10,380	55	13,130			**Average Trip Length:**	**6.79**			
						Weighted Average Trip Length:	**6.62**			

Note: Georgia studies are not included in summary statistics.

Weighted Average Trip Generation Rate: **7.81**

Multi-Family/Apartment and Residential Condo/Townhouse (ITE LUC 220/230)

Location	Size / Units	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Sarasota Co, FL	212	Jun-93	42	42	5.78	-	5.20	N/A	30.06	Sarasota County
Sarasota Co, FL	243	Jun-93	36	36	5.84	-	-	N/A	-	Sarasota County
Marion Co, FL	214	Apr-02	175	175	6.84	-	4.61	N/A	31.53	Kimley-Horn & Associates
Marion Co, FL	240	Apr-02	174	174	6.96	-	3.43	N/A	23.87	Kimley-Horn & Associates
Marion Co, FL	288	Apr-02	175	175	5.66	-	5.55	N/A	31.41	Kimley-Horn & Associates
Marion Co, FL	480	Apr-02	175	175	5.73	-	6.88	N/A	39.42	Kimley-Horn & Associates
Marion Co, FL	500	Apr-02	170	170	5.46	-	5.94	N/A	32.43	Kimley-Horn & Associates
Lake Co, FL	250	Dec-06	135	135	6.71	-	5.33	N/A	35.76	Tindale Oliver
Lake Co, FL	157	Dec-06	265	265	13.97	-	2.62	N/A	36.60	Tindale Oliver
Lake Co, FL	169	Dec-06	212	-	8.09	-	6.00	N/A	48.54	Tindale Oliver
Lake Co, FL	226	Dec-06	301	-	6.74	-	2.17	N/A	14.63	Tindale Oliver
Hernando Co, FL	312	Apr-07	456	-	4.09	-	5.95	N/A	24.34	Tindale Oliver
Hernando Co, FL	176	Apr-07	332	-	5.38	-	5.24	N/A	28.19	Tindale Oliver
Hernando Co, FL	31	May-96	31	31	6.12	9a-6p	4.98	N/A	30.48	Tindale Oliver
Hernando Co, FL	128	May-96	128	128	6.47	9a-6p	5.18	N/A	33.51	Tindale Oliver
Pasco Co, FL	229	Apr-02	198	198	4.77	9a-6p	-	N/A	-	Tindale Oliver
Pasco Co, FL	248	Apr-02	353	353	4.24	9a-6p	3.53	N/A	14.97	Tindale Oliver
Total Size	4,103					**Average Trip Length:**	**4.84**			
Total Size (TL)	3,631					**Weighted Average Trip Length:**	**5.10**			

				LUC 220: Multi-Family/Apt.
Total Size	3,467	13	Weighted Average Trip Generation Rate:	6.31
ITE	18,480	88	ITE Average Trip Generation Rate:	6.65
Blended total	21,947		**Blend of FL Studies and ITE Average Trip Generation Rate:**	**6.60**
				LUC 230: Condo/Townhouse
LUC 230 Studies are highlighted				
Total Size	636	4	Weighted Average Trip Generation Rate:	4.97
ITE	10,024	56	ITE Average Trip Generation Rate:	5.81
Blended total	10,660		**Blend of FL Studies and ITE Average Trip Generation Rate:**	**5.76**

Mobile Home Park (ITE LUC 240)

Location	Size / Units	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Marion Co, FL	67	Jul-91	22	22	5.40	48hrs.	2.29	N/A	12.37	Tindale Oliver
Marion Co, FL	82	Jul-91	58	58	10.80	24hr.	3.72	N/A	40.18	Tindale Oliver
Marion Co, FL	137	Jul-91	22	22	3.10	24hr.	4.88	N/A	15.13	Tindale Oliver
Sarasota Co, FL	996	Jun-93	181	181	4.19	-	4.40	N/A	18.44	Sarasota County
Sarasota Co, FL	235	Jun-93	100	100	3.51	-	5.10	N/A	17.90	Sarasota County
Marion Co, FL	188	Apr-02	147	-	3.51	24hr.	5.48	N/A	19.23	Kimley-Horn & Associates
Marion Co, FL	227	Apr-02	173	-	2.76	24hr.	8.80	N/A	24.29	Kimley-Horn & Associates
Marion Co, FL	297	Apr-02	175	-	4.78	24hr.	4.76	N/A	22.75	Kimley-Horn & Associates
Hernando Co, FL	1,892	May-96	425	425	4.13	9a-6p	4.13	N/A	17.06	Tindale Oliver
Total Size	4,121	9	1,303				**Average Trip Length:**	**4.84**		
							Weighted Average Trip Length:	**4.60**		

Weighted Average Trip Generation Rate: **4.17**

Assisted Living/Congregate Care Facility (ITE LUC 253)

Location	Size / Units	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Pinellas Park, FL	72	Aug-89	25	19	3.50	9am-5pm	2.20	79.0	7.70	Tindale Oliver
Palm Harbor, FL	200	Oct-89	58	40	-	9am-5pm	3.40	69.0	-	Tindale Oliver
Total Size	272	2	83				**Average Trip Length:**	**2.80**		
ITE	388	2					**Weighted Average Trip Length:**	**3.08**		
Blended total	660						Weighted Percent New Trip Average:	71.6		
	460							Weighted Average Trip Generation Rate:		3.50
								ITE Average Trip Generation Rate:		2.02
								Blend of FL Studies and ITE Average Trip Generation Rate:		**2.25**

Hotel (ITE LUC 310)

Location	Size (Rooms)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Pinellas Co, FL	174	Aug-89	134	106	12.50	7-11a/3-7p	6.30	79.0	62.21	Tindale Oliver
Pinellas Co, FL	114	Oct-89	30	14	7.30	12-7p	6.20	47.0	21.27	Tindale Oliver
Orange Co, FL	70	-	-	-	1.85	-	-	-	-	Orange County
Orange Co, FL	211	-	-	-	2.23	-	-	-	-	Orange County
Orange Co, FL	123	-	-	-	3.70	-	-	-	-	Orange County
Orange Co, FL	130	-	-	-	4.29	-	-	-	-	Orange County
Orange Co, FL	1,499	-	-	-	4.69	-	-	-	-	Orange County
Orange Co, FL	190	-	-	-	4.71	-	-	-	-	Orange County
Orange Co, FL	144	-			4.74	-	-	-	-	Orange County
Orange Co, FL	123	-	-	-	4.81	-	-	-	-	Orange County
Orange Co, FL	210	-			4.88	-	-	-	-	Orange County
Orange Co, FL	105	-	-	-	5.25	-	-	-	-	Orange County
Orange Co, FL	120	-	-	-	5.27	-	-	-	-	Orange County
Orange Co, FL	891	-			5.69	-	-	-	-	Orange County
Orange Co, FL	1,584	-	-	-	5.88	-	-	-	-	Orange County
Orange Co, FL	170	-			6.06	-	-	-	-	Orange County
Orange Co, FL	128	-	-	-	6.10	-	-	-	-	Orange County
Orange Co, FL	123	-			6.32	-	-	-	-	Orange County
Orange Co, FL	144	-	-	-	7.32	-	-	-	-	Orange County
Orange Co, FL	98	-	-	-	7.32	-	-	-	-	Orange County
Orange Co, FL	106	-	-	-	7.34	-	-	-	-	Orange County
Orange Co, FL	100	-	-	-	7.37	-	-	-	-	Orange County
Orange Co, FL	146	-			7.61	-	-	-	-	Orange County
Orange Co, FL	144	-	-	-	7.66	-	-	-	-	Orange County
Orange Co, FL	130	-			9.12	-	-	-	-	Orange County
Orange Co, FL	1,495	Apr-11	-	-	3.50	-	-	-	-	Orange County
Orange Co, FL	174	Jun-11	-	-	7.03	-	-	-	-	Orange County
Orange Co, FL	238	Oct-14	-	-	4.05	-	-	-	-	Orange County
Total Size	8,884	21	164				**Average Trip Length:**	**6.25**		
ITE	4,760	10					**Weighted Average Trip Length:**	**6.26**		
Blended total	13,644						Weighted Percent New Trip Average:	66.3		
								Weighted Average Trip Generation Rate:		5.30
								ITE Average Trip Generation Rate:		8.17
								Blend of FL Studies and ITE Average Trip Generation Rate:		**6.30**

Motel (ITE LUC 320)

Location	Size (Rooms)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Pinellas Co, FL	48	Oct-89	46	24	-	10a-2p	2.80	65.0	-	Tindale Oliver
Pinellas Co, FL	54	Oct-89	32	22	-	12p-7p	3.80	69.0	-	Tindale Oliver
Pinellas Co, FL	120	Oct-89	26	22	-	2p-7p	5.20	84.6	-	Tindale Oliver
Total Size	222	3	104				**Average Trip Length:**	**3.93**		
ITE	2,160	10					**Weighted Average Trip Length:**	**4.34**		
							Weighted Percent New Trip Average:	76.6		
								ITE Average Trip Generation Rate:		**5.63**

Health Fitness Club (ITE LUC 492)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Tampa, FL	-	Mar-86	33	31	-	-	7.90	94.0	-	Kimley-Horn & Associates
Total Size	-	-	33				**Average Trip Length:**	**n/a**		
ITE	15	1					Percent New Trip Average:	94.0		
								ITE Average Trip Generation Rate:		**32.93**

Day Care Center (ITE LUC 565)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Pinellas Co, FL	5.6	Aug-89	94	66	66.99	7a-6p	1.90	70.0	89.10	Tindale Oliver
Pinellas Co, FL	10.0	Sep-89	179	134	66.99	7a-6p	2.10	75.0	105.51	Tindale Oliver
Tampa, FL	-	Mar-86	28	25	-	-	2.60	89.0	-	Kimley-Horn & Associates
Total Size	15.6	2	301			**Average Trip Length:**	**2.20**			
ITE	35.0	7				**Weighted Average Trip Length:**	**2.03**			
Blended total	50.6							Weighted Percent New Trip Average:	73.2	

Weighted Average Trip Generation Rate: 66.99
ITE Average Trip Generation Rate: 74.06
Blend of FL Studies and ITE Average Trip Generation Rate: 71.88

Nursing Home (ITE LUC 620)

Location	Size (Beds)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Lakeland, FL	120	Mar-90	74	66	2.86	11a-4p	2.59	89.0	6.59	Tindale Oliver
Total Size	120	1	74			**Average Trip Length:**	**2.59**			
ITE	714	6				**Weighted Average Trip Length:**	**2.59**			
Blended total	834							Weighted Percent New Trip Average:	89.0	

ITE Average Trip Generation Rate: 7.60

General Office Building (ITE LUC 710)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Sarasota Co, FL	14.3	Jun-93	14	14	46.85	-	11.30	-	529.41	Sarasota County
Gwinnett Co, GA	98.0	Dec-92	-	-	4.30	-	5.40	-	-	Street Smarts
Gwinnett Co, GA	180.0	Dec-92	-	-	3.60	-	5.90	-	-	Street Smarts
Pinellas Co, FL	187.0	Oct-89	431	388	18.49	7a-5p	6.30	90.0	104.84	Tindale Oliver
St. Petersburg, FL	262.8	Sep-89	291	274	-	7a-5p	3.40	94.0	-	Tindale Oliver
Total Size	742.1	5	736			**Average Trip Length:**	**6.46**			
ITE	15,522.0	78				**Weighted Average Trip Length:**	**5.15**			
								Weighted Percent New Trip Average:	92.3	

Medical-Dental Office Building (ITE LUC 720): Collier County

Site	Size (1,000 sf)	Tues., Jan 11		Wedn., Jan 12		Thur., Jan 13		TOTAL		AVERAGE		AVERAGE (per 1,000 sf)		
		IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	TOTAL
Site 1	2.100	35	35	22	22	13	13	70	70	23.33	23.33	**11.11**	**11.11**	**22.22**
Site 2	3.000	40	40	52	52	53	53	145	145	48.33	48.33	**16.11**	**16.11**	**32.22**
Site 3	2.000	28	28	19	21	24	26	71	75	23.67	25.00	**11.84**	**12.50**	**24.34**
Site 4	1.000	30	30	52	52	57	57	139	139	46.33	46.33	**46.33**	**46.33**	**92.66**
Site 5	3.024	31	32	43	43	24	24	98	99	32.67	33.00	**10.80**	**10.91**	**21.71**
Site 6	1.860	22	24	19	17	11	11	52	52	17.33	17.33	**9.32**	**9.32**	**18.64**
Average												**17.59**	**17.71**	**35.30**
Average (excluding Site 4)												**11.84**	**11.99**	**23.83**

Medical-Dental Office Building (ITE LUC 720)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Tampa, FL	-	Mar-86	33	26	-	-	6.00	79.0	-	Kimley-Horn & Associates
Palm Harbor, FL	14.6	Oct-89	104	76	33.98	9a-5p	6.30	73.0	156.27	Tindale Oliver
St. Petersburg, FL	-	Nov-89	34	30	57.20	9a-4p	1.20	88.0	-	Tindale Oliver
Hernando Co, FL	58.4	May-96	390	349	28.52	9a-6p	6.47	89.5	165.09	Tindale Oliver
Hernando Co, FL	28.0	May-96	202	189	49.75	9a-6p	6.06	93.8	282.64	Tindale Oliver
Charlotte Co, FL	11.0	Oct-97	-	186	49.50	9a-5p	4.60	92.1	209.67	Tindale Oliver
Charlotte Co, FL	28.0	Oct-97	-	186	31.00	9a-5p	3.60	81.6	91.04	Tindale Oliver
Charlotte Co, FL	30.4	Oct-97	-	324	39.80	9a-5p	3.30	83.5	109.68	Tindale Oliver
Citrus Co, FL	38.9	Oct-03	-	168	32.26	8-6p	6.80	97.1	213.03	Tindale Oliver
Citrus Co, FL	10.0	Nov-03	-	340	40.56	8-630p	6.20	92.4	232.33	Tindale Oliver
Citrus Co, FL	5.3	Dec-03	-	20	29.36	8-5p	5.25	95.2	146.78	Tindale Oliver
Orange Co, FL	50.6	-	-	-	26.72	-	-	-	-	Orange County
Orange Co, FL	23.5	-	-	-	16.58	-	-	-	-	Tindale Oliver
Total Size	298.6	11	763			**Average Trip Length:**	**5.07**			
ITE	450.0	10				**Weighted Average Trip Length:**	**5.55**			
Blended total	748.6							Weighted Percent New Trip Average:	88.9	

Office Park (ITE LUC 750)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Sarasota Co, FL	30	Jun-93	10	10	9.10	-	9.00	-	81.90	Sarasota County
Sarasota Co, FL	36	Jun-93	17	17	20.50	-	8.30	-	170.15	Sarasota County
Sarasota Co, FL	45	Jun-93	42	42	37.00	-	4.90	-	181.30	Sarasota County
Total Size	111.0	3	69			**Average Trip Length:**	**7.40**			
ITE	4,944.0	12				**Weighted Average Trip Length:**	**7.11**			
Blended total	5,055.0							Weighted Percent New Trip Average:	-	

Weighted Average Trip Generation Rate: 24.11
ITE Average Trip Generation Rate: 11.42
Blend of FL Studies and ITE Average Trip Generation Rate: 11.70

Business Park (ITE LUC 770)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Collier Co, FL	14.1	May-99	-	55	33.48	8a-6p	3.60	72.7	87.62	Tindale Oliver
Collier Co, FL	66.0	May-99	-	43	11.53	8a-6p	5.70	79.0	51.92	Tindale Oliver
Collier Co, FL	211.1	May-99	-	284	17.91	8a-6p	5.40	93.0	89.94	Tindale Oliver
Total Size	291.2	3					**Average Trip Length:**	**4.90**		
ITE	6,288.0	16					**Weighted Average Trip Length:**	**5.38**		
Blended total	6,579.2						Weighted Percent New Trip Average:	88.8		

Discount Superstore (ITE LUC 813)

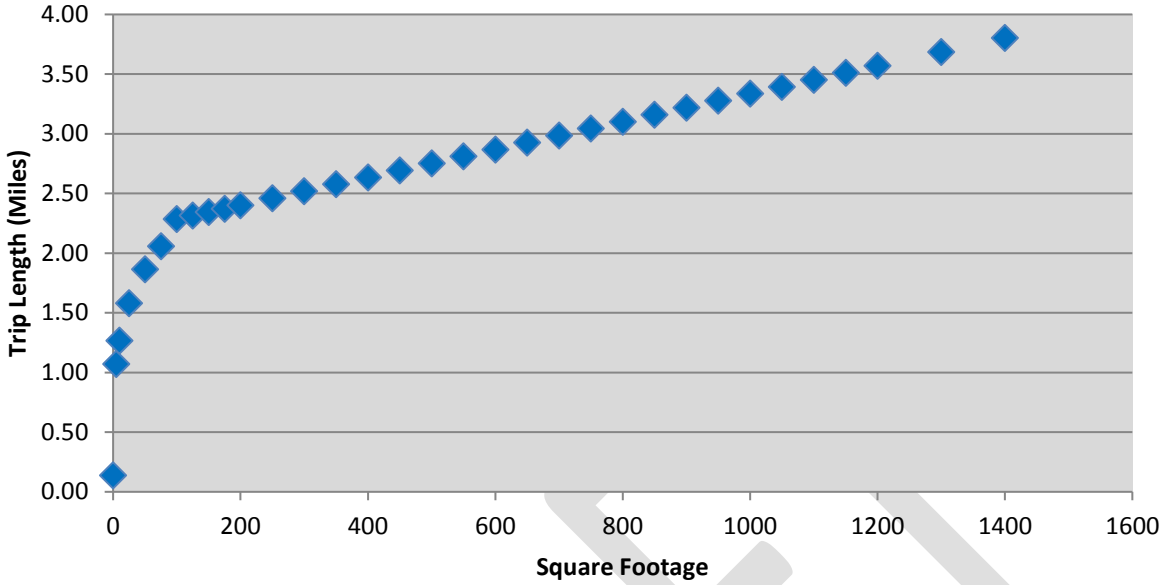
Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Citrus Co, FL	203.6	Nov-03	-	236	55.01	8a-6p	-	91.8	0.0	Tindale Oliver
Total Size	203.6	1					**Average Trip Length:**	**n/a**		
ITE	12,740.0	65					**Weighted Average Trip Length:**	**n/a**		
Blended total	12,943.6						Weighted Percent New Trip Average:	-		

Average Trip Generation Rate:	55.01
ITE Average Trip Generation Rate:	50.75
Blend of FL Studies and ITE Average Trip Generation Rate:	**50.82**

Shopping Center (ITE LUC 820)

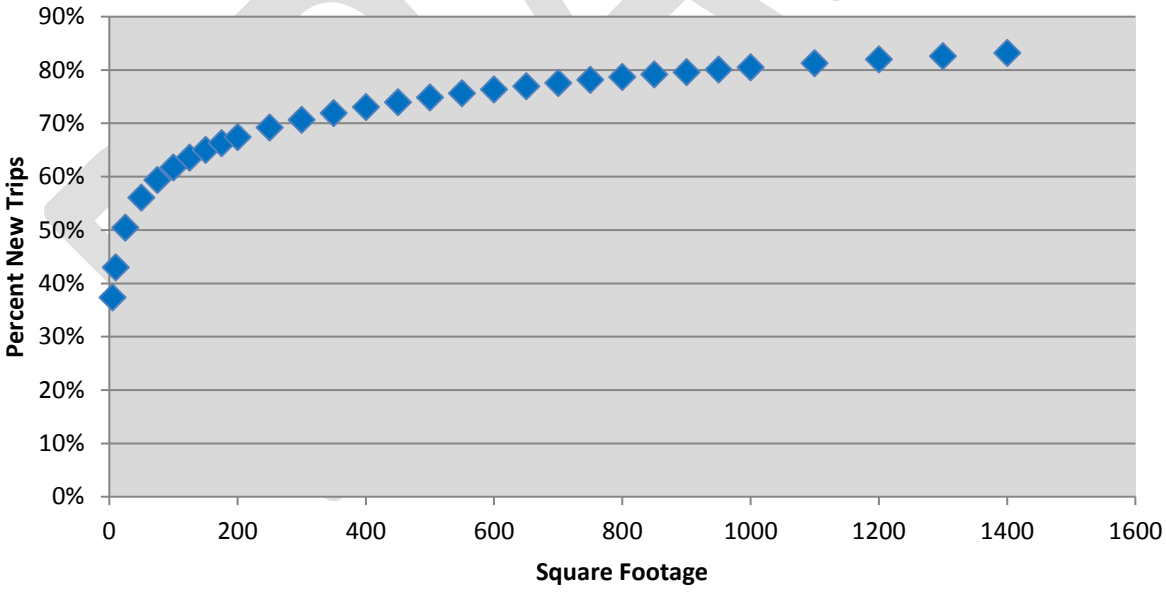
Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Tampa, FL	-	Mar-86	527	348	-	-	-	66.0	-	Kimley-Horn & Associates
Tampa, FL	-	Mar-86	170	-	-	-	1.70	-	-	Kimley-Horn & Associates
Tampa, FL	-	Mar-86	354	269	-	-	-	76.0	-	Kimley-Horn & Associates
Tampa, FL	-	Mar-86	144	-	-	-	2.50	-	-	Kimley-Horn & Associates
St. Petersburg, FL	1,192.0	Aug-89	384	298	-	11a-7p	3.60	78.0	-	Tindale Oliver
St. Petersburg, FL	132.3	Sep-89	400	368	77.00	10a-7p	1.80	92.0	127.51	Tindale Oliver
Largo, FL	425.0	Aug-89	160	120	26.73	10a-6p	2.30	75.0	46.11	Tindale Oliver
Dunedin, FL	80.5	Sep-89	276	210	81.48	9a-5p	1.40	76.0	86.69	Tindale Oliver
Pinellas Park, FL	696.0	Sep-89	485	388	-	9a-6p	3.20	80.0	-	Tindale Oliver
Seminole, FL	425.0	Oct-89	674	586	-	-	-	87.0	-	Tindale Oliver
Hillsborough Co, FL	134.0	Jul-91	-	-	-	-	1.30	74.0	-	Tindale Oliver
Hillsborough Co, FL	151.0	Jul-91	-	-	-	-	1.30	73.0	-	Tindale Oliver
Collier Co, FL	-	Aug-91	68	64	-	-	3.33	94.1	-	Tindale Oliver
Collier Co, FL	-	Aug-91	208	154	-	-	2.64	74.0	-	Tindale Oliver
Sarasota/Bradenton, FL	109.0	Sep-92	300	185	-	12a-6p	-	61.6	-	King Engineering Associates, Inc.
Ocala, FL	133.4	Sep-92	300	192	-	12a-6p	-	64.0	-	King Engineering Associates, Inc.
Gwinnett Co, GA	99.1	Dec-92	-	-	46.00	-	3.20	70.0	103.04	Street Smarts
Gwinnett Co, GA	314.7	Dec-92	-	-	27.00	-	8.50	84.0	192.78	Street Smarts
Sarasota Co, FL	110.0	Jun-93	58	58	122.14	-	3.20	-	-	Sarasota County
Sarasota Co, FL	146.1	Jun-93	65	65	51.53	-	2.80	-	-	Sarasota County
Sarasota Co, FL	157.5	Jun-93	57	57	79.79	-	3.40	-	-	Sarasota County
Sarasota Co, FL	191.0	Jun-93	62	62	66.79	-	5.90	-	-	Sarasota County
Hernando Co, FL	107.8	May-96	608	331	77.60	9a-6p	4.68	54.5	197.85	Tindale Oliver
Charlotte Co, FL	88.0	Oct-97	-	-	73.50	9a-5p	1.80	57.1	75.56	Tindale Oliver
Charlotte Co, FL	191.9	Oct-97	-	-	72.00	9a-5p	2.40	50.9	87.97	Tindale Oliver
Charlotte Co, FL	51.3	Oct-97	-	-	43.00	9a-5p	2.70	51.8	60.08	Tindale Oliver
Lake Co, FL	67.8	Apr-01	246	177	102.60	-	3.40	71.2	248.37	Tindale Oliver
Lake Co, FL	72.3	Apr-01	444	376	65.30	-	4.50	59.0	173.37	Tindale Oliver
Pasco Co, FL	65.6	Apr-02	222	-	145.64	9a-5p	1.46	46.9	99.62	Tindale Oliver
Pasco Co, FL	75.8	Apr-02	134	-	38.23	9a-5p	2.36	58.2	52.52	Tindale Oliver
Citrus Co, FL	185.0	Oct-03	-	784	55.84	8a-6p	2.40	88.1	118.05	Tindale Oliver
Citrus Co, FL	91.3	Nov-03	-	390	54.50	8a-6p	1.60	88.0	76.77	Tindale Oliver
Bozeman, MT	104.3	Dec-06	359	359	46.96	-	3.35	49.0	77.08	Tindale Oliver
Bozeman, MT	159.9	Dec-06	502	502	56.49	-	1.56	54.0	47.59	Tindale Oliver
Bozeman, MT	35.9	Dec-06	329	329	69.30	-	1.39	74.0	71.28	Tindale Oliver
Total Size	5,757.5		7,536				**Average Trip Length:**	**n/a**		
							Weighted Average Trip Length:	**n/a**		

Figure A-1
Retail/Shopping Center (LUC 820) – Florida Curve Trip Length Regression



Source: Regression analysis based on FL Studies data for LUC 820

Figure A-2
Retail/Shopping Center (LUC 820) – Florida Curve Percent New Trips Regression



Source: Regression analysis based on FL Studies data for LUC 820

Pharmacy/Drugstore w/Drive-Thru (ITE LUC 880 & 881)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Pasco Co, FL	11.1	Apr-02	138	38	88.97	-	2.05	27.5	50.23	Tindale Oliver
Pasco Co, FL	12.0	Apr-02	212	90	122.16	-	2.04	42.5	105.79	Tindale Oliver
Pasco Co, FL	15.1	Apr-02	1192	54	97.96	-	2.13	28.1	58.69	Tindale Oliver
Total Size	38.2	3	1,542			**Average Trip Length:**	**2.07**			
ITE	196.0	16				**Weighted Average Trip Length:**	**2.08**			
Blended total	234.2									

Weighted Percent New Trip Average: 32.5

Average Trip Generation Rate: 103.03

ITE Average Trip Generation Rate (LUC 880 / 881): 90.06 / 96.91

Blend of FL Studies and ITE Average Trip Generation Rate: 95.96

Furniture Store (ITE LUC 890)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Largo, FL	15.0	7/28-30/92	64	34	-	-	4.63	52.5	-	Tindale Oliver
Tampa, FL	16.9	Jul-92	68	39	-	-	7.38	55.7	-	Tindale Oliver
Total Size	31.9	2	132			**Average Trip Length:**	**6.01**			
ITE	897.0	13				**Weighted Average Trip Length:**	**6.09**			

Weighted Percent New Trip Average: 54.2

ITE Average Trip Generation Rate: **5.06**

Gasoline/Service Station with and w/o Car Wash (ITE LUC 944 & 946)

Location	Size (1,000 sf)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Largo, FL	0.6	Nov-89	70	14	-	8am-5pm	1.90	23.0	-	Tindale Oliver
Collier Co, FL	-	Aug-91	168	40	-	-	1.01	23.8	-	Tindale Oliver
Total Size	0.6	1	238			**Average Trip Length:**	**1.46**			
ITE LUC 944 (vfp)	48.0	6				**Weighted Average Trip Length:**	**1.90**			
ITE LUC 946 (vfp)	120.0	10								

Weighted Percent New Trip Average: 23.0

ITE Average Trip Generation Rate - per fuel position (LUC 944): 168.56

ITE Average Trip Generation Rate - per fuel position (LUC 946): 152.84

Blended ITE Average Trip Generation Rate - per fuel position: 157.33

Self-Service Car Wash (ITE LUC 947)

Location	Size (Bays)	Date	Total # Interviews	# Trip Length Interviews	Trip Gen Rate	Time Period	Trip Length	Percent New Trips	VMT	Source
Largo, FL	10	Nov-89	111	84	-	8am-5pm	2.00	76.0	-	Tindale Oliver
Clearwater, FL	-	Nov-89	177	108	-	10am-5pm	1.30	61.0	-	Tindale Oliver
Collier, FL	11	Dec-09	304	-	30.24	-	2.50	57.0	-	Tindale Oliver
Collier, FL	8	Jan-09	186	-	22.75	-	1.96	72.0	-	Tindale Oliver
Total Size	29	3	778			**Average Trip Length:**	**1.94**			
Total Size (TGR)	19	2				**Weighted Average Trip Length:**	**2.18**			
ITE	5	1								
Blended total	24									

Weighted Percent New Trip Average: 67.7

Weighted Average Trip Generation Rate: 27.09

ITE Average Trip Generation Rate: 108.00

Blend of FL Studies and ITE Average Trip Generation Rate: 43.94

APPENDIX B
Cost Component Calculations

Appendix B: Cost Component

This appendix presents the detailed calculations for the cost component of the roadway impact fee update. Supporting data and estimates are provided for all cost variables, including:

- Design
- Right-of-Way
- Construction
- Construction Engineering/Inspection
- Roadway Capacity

Design

County Roadways

The design cost factor for county roads was estimated as a percentage of the construction cost per lane mile. This factor was determined through a review of the design-to-construction cost ratios from previously completed roadway impact fee studies throughout Florida. For county roadways throughout Florida, the design factors ranged from six (6) percent to 14 percent, with a weighted average of 10 percent. For purposes of this update study, the design cost for county roads was estimated at 10 percent of the construction cost per lane mile based on a review of the available data (see Table B-1 for additional information).

Table B-1
Design Cost Factor for County Roads – Recent Impact Fee Studies

Year	County	County Roadways (Cost per Lane Mile)		
		Design	Constr.	Design Ratio
2006	Collier	$323,639	$2,558,546	13%
2006	Citrus	$361,774	$2,584,099	14%
2006	Highlands	$235,030	$1,678,785	14%
2006	Marion	$185,333	$1,941,244	10%
2007	Pasco	$246,324	$3,079,051	8%
2007	Lake	$232,882	$2,911,021	8%
2007	Flagler	$174,000	$1,740,000	10%
2007	Volusia	$291,696	$2,651,778	11%
2008	Leon	$212,800	$2,660,000	8%
2008	Sumter	$178,960	$2,237,000	8%
2009	Collier	$217,000	$3,100,000	7%
2009	Polk	$95,400	$1,590,000	6%
2009	Hillsborough/Tampa	$308,000	$2,800,000	11%
2010	Collier	$119,560	$1,708,000	7%
2011	Sarasota/North Port	$240,000	$2,400,000	10%
2012	Osceola	$371,196	$2,651,400	14%
2012	Orange	$264,000	$2,400,000	11%
2012	City of Orlando	$288,000	$2,400,000	12%
2012	City of Sarasota	$240,000	$2,400,000	10%
2013	Hernando	$198,000	$1,980,000	10%
2013	Charlotte	$220,000	$2,200,000	10%
2014	Indian River	$159,000	$1,598,000	10%
2015	Collier	$270,000	$2,700,000	10%
2015	Brevard	$242,000	$2,023,000	12%
2015	Sumter	$210,000	$2,100,000	10%
2015	Marion	$167,000	$2,668,000	6%
2015	Palm Beach	$224,000	$1,759,000	13%
2016	Hillsborough	$348,000	$2,897,000	12%
2016	St. Lucie County	$220,000	$2,200,000	10%
Average		**$235,986**	**$2,331,584**	**10%**

(a)

Source: Recent impact fee studies constructed throughout Florida
Note: Letter references (i.e., "a") are used to assist with footnotes and sourcing

Right-of-Way

The ROW cost reflects the total cost of the acquisitions along a corridor that was necessary to have sufficient cross-section width to widen an existing road or, in the case of new construction, build a new road.

County Roadways

For impact fee purposes, the ROW cost for county roads was estimated as a percentage of the construction cost per lane mile. To determine a ROW acquisition cost per lane mile for county roads, Tindale Oliver conducted a review of recently completed ROW acquisitions and current ROW estimates along capacity expansion projects in Clay County and also reviewed ROW-to-construction cost ratios from other counties in Florida. Recent Clay County improvements had significant variation in ROW-to-construction ratios:

- Old Jennings Road from SR 21 to Brananfield Road – 23%
- Henley Road from CR 218 to Black Creek Bridge – 48%
- CR 209 from Black Creek Bridge to CR 200 – 6%

These three improvements result in a weighted average ratio of 37 percent (see Table B-2). The ROW-to-construction factor for recent studies throughout Florida ranged from 21 percent to 68 percent with an average of 40 percent (see Table B-3). For purposes of this update study, a ratio of 40 percent was used. While slightly higher than local improvements, this estimate reflects the fact that the CR 209 improvement is a low outlier.

Table B-2
Right-of-Way Cost per Lane Mile – Clay County Improvements

County	Description	From	To	Year	Feature	Design	Length	Lanes Added	Lane Miles Added	ROW Cost	ROW Cost per Lane Mile	Construction Cost	ROW/Constr. Ration
Local Projects													
Clay	Old Jennings Rd	SR 21	Brananfield Rd	2009	2 to 4	Urban	1.10	2	2.20	$1,122,006	$510,003	$4,807,479	23%
Clay	Henley	CR 218	Black Creek Bridge	2009	2 to 4	Urban	4.00	2	8.00	$11,024,191	$1,378,024	$22,737,553	48%
Clay	CR 209	Black Creek Bridge	CR 200	2009	2 to 4	Urban	0.95	2	1.90	$385,483	$202,886	$5,962,899	6%
Total									**12.10**	**$12,531,680**	**$1,035,676**	**$33,507,931**	**37%**

Source: Clay County Engineering and Public Works Department

Table B-3
Right-of-Way Factor for County Roads – Recent Impact Fee Studies

Year	County	County Roadways (Cost per Lane Mile)		
		ROW	Constr.	ROW Ratio
2006	Collier	$1,751,790	$2,558,546	68%
2006	Citrus	$784,599	$2,584,099	30%
2006	Highlands	$468,853	$1,678,785	28%
2006	Marion	$1,005,123	$1,941,244	52%
2007	Pasco	$814,517	$3,079,051	26%
2007	Lake	$599,185	$2,911,021	21%
2007	Flagler	$460,000	$1,740,000	26%
2007	Volusia	$858,109	$2,651,778	32%
2008	Leon	$1,120,000	$2,660,000	42%
2008	Sumter	$802,000	$2,237,000	36%
2009	Collier	$1,300,000	$3,100,000	42%
2009	Hillsborough/Tampa	$1,500,000	$2,800,000	54%
2010	Collier	$901,000	$1,708,000	53%
2011	Sarasota/North Port	$620,000	$2,400,000	26%
2012	Osceola	$1,087,074	$2,651,400	41%
2012	Orange	$1,080,000	$2,400,000	45%
2012	City of Orlando	$1,080,000	$2,400,000	45%
2012	City of Sarasota	$620,000	$2,400,000	26%
2013	Hernando	$811,800	$1,980,000	41%
2013	Charlotte	$1,034,000	$2,200,000	47%
2014	Indian River	$656,000	$1,598,000	41%
2015	Collier	$863,000	$2,700,000	32%
2015	Brevard	$708,000	$2,023,000	35%
2015	Sumter	$945,000	$2,100,000	45%
2015	Marion	$1,001,000	$1,668,000	60%
2015	Palm Beach	$721,000	$1,759,000	41%
2016	Hillsborough	$1,448,000	$2,897,000	50%
2016	St. Lucie	$990,000	$2,200,000	45%
Average		**$929,645**	**$2,322,354**	**40%**

(a)

Source: Recent impact fee studies constructed throughout Florida
Note: Letter references (i.e., "a") are used to assist with footnotes and sourcing

Construction

County Roadways

A review of construction cost data for recent local county roadway capacity expansion projects identified three recent improvements in Clay County. These improvement have a weighted average construction cost of approximately **$2.77 million** per lane mile, as shown in Table B-4:

- Old Jennings Road from SR 21 to Brananfield Road
- Henley Road from CR 218 to Black Creek Bridge
- CR 209 from Black Creek Bridge to CR 200

In addition to local data, a review of recently bid projects throughout Florida was conducted. As shown in Table B-5, a total of 71 projects from 18 different counties provided a weighted average cost per lane mile of $2.17 million per lane mile. When compared to the statewide bids, the Clay County improvements have a significantly higher cost per lane mile. Due to the small sample size of local data, the total cost per lane mile for Clay County improvements was averaged with the total cost per lane mile for statewide improvements.

As shown in Table B-5, a construction cost of $2.50 million per lane mile was estimated for urban-design (curb & gutter) county roads in Clay County for impact fee purposes.

Urban Design vs. Rural Design

Due to a lack of available roadway construction data for rural-design (open drainage) roadways, the cost per lane mile for these types of roads was calculated using and adjustment factor. This factor was based on the rural-to-urban design cost ratio from the most recent FDOT District 7 Long Range Estimates[2] provided by FDOT. Based on the LRE, the costs for rural-design roadway capacity expansion (new road construction or lane addition) is approximately 77 percent of the construction costs for urban-design roadway improvements (see Table B-6).

[2] Data not available for FDOT District 2

Table B-4
Construction Cost per Lane Mile – Clay County Improvements

County	Description	From	To	Year	Feature	Design	Length	Lanes Added	Lane Miles Added	Construction Cost	Constr. Cost per Lane Mile
Local Projects											
Clay	Old Jennings Rd	SR 21	Brananfield Rd	2009	2 to 4	Urban	1.10	2	2.20	$4,807,479	$2,185,218
Clay	Henley	CR 218	Black Creek Bridge	2009	2 to 4	Urban	4.00	2	8.00	$22,737,553	$2,842,194
Clay	CR 209	Black Creek Bridge	CR 200	2009	2 to 4	Urban	0.95	2	1.90	$5,962,899	$3,138,368
Total									**12.10**	**$33,507,931**	**$2,769,250**

Source: Clay County Engineering and Public Works Department

Table B-5
Construction Cost – County Road Improvements from Other Jurisdictions throughout Florida

County	District	Description	From	To	Year	Status	Feature	Design	Length	Lanes Added	Lane Miles Added	Construction Cost	Construction Cost per Lane Mile
Orange	5	Clarcona-Ocoee Rd	Hiawassee Rd	Clark	2009	Bid	2 to 4	Urban	2.50	2	5.00	$10,182,738	$2,036,548
Orange	5	Woodbury Rd	S. of SR 50	Challenger Pkwy	2009	Bid	2 to 4	Urban	0.65	2	1.30	$4,088,942	$3,145,340
Orange	5	Sand Lake Rd	President's Dr	FL Mall	2009	Bid	2 to 4	Urban	1.00	2	2.00	$6,020,755	$3,010,378
Orange	5	Taft-Vineland Road Extension	Central Florida Pkwy	John Young Pkwy	2009	Bid	2 to 4	Urban	0.70	2	1.40	$4,462,535	$3,187,525
Osceola	5	Narcoossee Rd	US 192	Orange Co. Line	2009	Bid	2 to 4	Urban	7.40	2	14.80	$47,360,000	$3,200,000
Osceola	5	Osceola Pkwy (Ph. I)	FL Turnpike	Buenaventura Blvd	2009	Bid	4 to 6	Urban	1.57	2	3.14	$5,966,000	$1,900,000
Osceola	5	Poinciana Blvd (Ph. II)	Crescent Lakes	US 17/92	2009	Bid	2 to 4	Urban	2.50	2	5.00	$16,000,000	$3,200,000
Osceola	5	Old Lake Wilson Rd (Ph. I)	Livingston Rd	Sinclair Rd	2009	Bid	2 to 4	Urban	2.30	2	4.60	$14,720,000	$3,200,000
Hillsborough	7	Boyette Rd, Ph. III	Donneymoor Dr	Bell Shoals Rd	2009	Bid	2 to 4	Urban	1.84	2	3.68	$20,814,450	$5,656,101
Hillsborough	7	Race Track Rd, Ph. IV	Douglas Rd	Hillsborough Ave	2009	Bid	2 to 6	Urban	0.69	4	2.76	$5,375,855	$1,947,774
Sarasota	1	Fruitville Rd (Ph. I)	Tatum Rd	Debrecen Rd	2009	Bid	2 to 4	Urban	0.72	2	1.44	$4,355,796	$3,024,858
Sarasota	1	Fruitville Rd (Ph. II)	Coburn Rd	Tatum Rd	2009	Bid	2 to 4	Urban	1.26	2	2.52	$8,557,904	$3,395,994
Lee	1	Colonial Blvd (CR 884)	I-75	SR 82	2009	Bid	4 to 6	Urban	2.70	2	5.40	$14,576,393	$2,699,332
Indian River	4	College Lane Rd	Extension IRSC	66th Ave	2009	Bid	0 to 2	Urban	0.50	2	1.00	$1,700,000	$1,700,000
Indian River	4	16th St	66th Ave	74th Ave	2009	Bid	0 to 2	Urban	1.27	2	2.54	$3,109,321	$1,224,142
Polk	1	Pine Tree Trail	Ernie Caldwell Blvd	CR 54/Reagan Pkwy	2009	Bid	0 to 2	Urban	1.40	2	2.80	$3,442,332	$1,229,404
Polk	1	Lakeland Highlands Rd	Polk Pkwy	CR 540A	2009	Bid	2 to 4	Urban	3.01	2	6.02	$13,603,672	$2,259,746
Palm Beach	4	Alt. A1A	S. of Frederick Small Rd	Center St	2009	Bid	4 to 6	Urban	4.40	2	8.80	$6,364,139	$723,198
Palm Beach	4	Lyons Rd	Glades Rd	Yamato Rd	2009	Bid	4 to 6	Urban	1.80	2	3.60	$5,967,464	$1,657,629
Palm Beach	4	Hypoluxo Rd	Jog Rd	Military Tr	2009	Bid	4 to 6	Urban	2.00	2	4.00	$4,054,386	$1,013,597
Palm Beach	4	Lawrence Rd	S. of C. Stanley Weaver Canal	N. of C. Stanley Weaver Canal	2009	Bid	2 to 4	Urban	0.20	2	0.40	$1,051,680	$2,629,200
Collier	1	Oil Well Rd (Segment 2)	Immokalee Rd	E. of Everglades Blvd	2009	Bid	2 to 4/6	Urban	5.05	2/4	10.92	$15,091,068	$1,381,966
Collier	1	Oil Well Rd (Segment 4A)	W. of Oil Well Grade Rd	W. of Camp Keais Rd	2009	Bid	2 to 6	Urban	4.72	4	18.88	$15,875,782	$840,878
Marion	5	CR 200A	US 441	NE 35th St	2009	Bid	2 to 4	Urban	1.73	2	3.46	$6,451,296	$1,864,536
Marion	5	NW 44th Ave	US 27	NW 60th St	2009	Bid	2 to 4	Urban	2.63	2	5.26	$5,910,189	$1,123,610
Marion	5	SE 31st St	SE 19th Ave	SE 36th Ave	2009	Bid	2 to 4	Urban	1.50	2	4.20	$5,544,524	$1,320,125
Marion	5		SE 36th Ave	SR 464	2009	Bid	0 to 4	Urban	0.30	4			
Orange	5	Alafaya Tr	Avalon Park Blvd	Mark Twain Blvd	2010	Bid	2 to 4	Urban	3.83	2	7.66	$18,918,599	$2,469,791
Broward	4	Bailey Rd	NW 64th Ave / SW 81st Ave	SR 7 (US 441)	2010	Bid	2 to 4	Urban	2.00	2	4.00	$6,330,297	$1,582,574
Lee	1	Six Mile Cypress Pkwy	Daniels Pkwy	S. of Winkler Rd Ext.	2010	Bid	2 to 4	Urban	3.09	2	6.18	$6,711,242	$1,085,961
Charlotte	1	Piper Rd	Henry St	Jones Loop Rd	2010	Bid	2 to 4	Sub-Urb	2.10	2	4.20	$8,627,803	$2,054,239
Indian River	4	53rd St	Kings Hwy	Lateral H Canal	2010	Bid	0 to 4	Urban	2.04	4	8.16	$7,000,000	$857,843
Indian River	4	53rd St	Lateral H Canal	Indian River Blvd	2010	Bid	0 to 4	Urban	0.50	4	2.00	$7,605,993	$3,802,997

Table B-5 (continued)
Construction Cost – County Road Improvements from Other Jurisdictions throughout Florida

County	District	Description	From	To	Year	Status	Feature	Design	Length	Lanes Added	Lane Miles Added	Construction Cost	Construction Cost per Lane Mile
Palm Beach	4	45th St	Jog Rd	E. of Haverhill Rd	2010	Bid	2 to 4	Urban	1.50	2	3.00	$12,423,103	$4,141,034
Palm Beach	4	Jog Rd	S. of 45th St	N. of 45th St	2010	Bid	0 to 4	Urban	0.50	4	2.00	$4,960,399	$2,480,200
Palm Beach	4	Congress Ave	Lantana Rd	Melaluca Ln	2010	Bid	4 to 6	Urban	1.30	2	2.60	$6,130,698	$2,357,961
Palm Beach	4	Seminole Pratt Whitney Rd	SR 80	Sycamore Dr	2010	Bid	2 to 4	Urban	4.20	2	8.40	$9,930,460	$1,182,198
Palm Beach	4	Seminole Pratt Whitney Rd	S. of M Canal	S. of Orange Blvd	2010	Bid	2 to 4	Urban	1.40	2	2.80	$2,820,892	$1,007,461
Citrus	7	CR 486	SR 44	Forest Ridge Blvd	2010	Bid	2 to 4	Urban	6.30	2	12.60	$26,614,211	$2,112,239
Brevard	5	Pineda Cswy Extension	I-95	W. of Wickham Rd	2010	Bid	0 to 4	Urban	2.10	4	8.40	$17,238,865	$2,052,246
Sarasota	1	North Cattlemen Rd	Richardson Rd	Desoto Rd	2011	Bid	2 to 4	Urban	2.55	2	5.10	$11,101,990	$2,176,861
Lee	1	Daniels Pkwy	Chamberlin Pkwy	Gateway Blvd	2011	Bid	4 to 6	Urban	2.05	2	4.10	$2,906,553	$708,915
Orange	5	Rouse Rd	SR 50	Corporate Blvd	2011	Bid	2 to 4	Urban	2.60	2	5.20	$29,380,249	$5,650,048
Orange	5	CR 535 Seg. A	Magnolia Park Ct	SR 429	2011	Bid	2 to 4	Urban	1.37	2	2.74	$8,390,570	$3,062,252
Osceola	5	Goodman Rd	Tri-County	Sand Mine Rd	2011	Bid	0 to 2	Urban	3.53	2	7.06	$7,060,000	$1,000,000
Pinellas	1	Bryan Dairy Rd	Starkey Rd (CR 1)	72nd St	2011	Bid	4 to 6	Urban	1.47	2	2.94	$10,327,383	$3,512,715
Hernando	7	Elgin Blvd	Mariner Blvd	East 3900'	2011	Bid	2 to 4	Urban	0.74	2	1.48	$2,684,566	$1,813,896
Hernando	7	Sunshine Grove Rd	SR 50	Ken Austin Pkwy	2011	Bid	2 to 4	Urban	2.10	2	4.20	$4,646,801	$1,106,381
Palm Beach	4	Lyons Rd	N. of West Atlantic Ave	S. of Boynotno Beach Blvd	2011	Bid	0 to 2	Urban	3.20	2	6.40	$5,329,359	$832,712
Charlotte	1	Burnt Store Rd (Ph. I)	US 41	Notre Dame Blvd	2011	Bid	2 to 4	Urban	2.40	2	4.80	$13,512,394	$2,815,082
Hillsborough	7	Madison Ave	US 41	78th St	2011	Bid	2 to 4	Urban	2.29	2	4.58	$7,000,000	$1,528,384
Indian River	4	Oslo Rd Ph. II	43rd Ave	27th Ave	2011	Bid	2 to 4D	Urban	1.20	3	3.60	$4,531,822	$1,258,839
Indian River	4	Oslo Rd Ph. III	43rd Ave	58th Ave	2012	Bid	2 to 4	Urban	1.15	2	2.30	$3,812,202	$1,657,479
Indian River	4	66th Ave	SR 60	49th St	2012	Bid	2 to 4	Urban	3.05	2	6.10	$20,773,389	$3,405,474
Polk	1	Kathleen Rd (CR35A) Ph. II	Galloway Rd	Duff Rd	2012	Bid	2 to 4	Urban	3.00	2	6.00	$17,813,685	$2,968,948
Polk	1	Bartow Northern Connector Ph. I	US 98	US 17	2012	Bid	0 to 4	Urban	2.00	4	8.00	$11,255,736	$1,406,967
Volusia	5	Tymber Creek Rd	SR 40	Peruvian Ln	2012	Bid	2 to 4	Urban	0.75	2	1.50	$5,276,057	$3,517,371
Palm Beach	4	Jog Rd	N. of SR 710	N. of Florida's Turnpike	2012	Bid	0 to 4	Urban	0.70	4	2.80	$3,413,874	$1,219,241
Palm Beach	4	West Atlantic Ave	W. of Lyons Rd	Starkey Rd	2012	Bid	2 to 4	Urban	0.80	2	1.60	$8,818,727	$5,511,704
Palm Beach	4	60th St N & SR 7 Ext.	E. of Royal Palm Beach Blvd	SR 7	2012	Bid	0 to 2	Urban	1.50	2	3.00	$3,821,404	$1,273,801
Brevard	5	Babcock St	S. of Foundation Park Blvd	Malabar Rd	2013	Bid	2 to 4	Urban	12.40	2	24.80	$56,000,000	$2,258,065
Collier	1	Collier Blvd (CR 951)	Golden Gate Blvd	Green Blvd	2013	Bid	4 to 6	Urban	2.74	2	5.48	$23,295,924	$4,251,081
Marion	5	SW 110th St	US 41	SW 200th Ave	2013	Bid	0 to 2	Urban	0.11	2	0.22	$438,765	$1,994,386
Marion	5	NW 35th St	NW 35th Avenue Rd	NW 27th Ave	2013	Bid	0 to 4	Urban	0.50	4	4.60	$8,616,236	$1,873,095
Marion	5	NW 35th St	NW 27th Ave	US 441	2013	Bid	2 to 4	Urban	1.30	2			
Sumter	5	C-466A, Ph. III	US 301 N	Powell Rd	2013	Bid	2 to 3/4	Urban	1.10	2	2.20	$4,283,842	$1,947,201
Sarasota	1	Honore Ave/Pinebrook Rd Ext.	SR 681	Laurel Rd	2013	Bid	0 to 2	Rural	2.70	2	5.40	$11,699,059	$2,166,492
Collier	1	Golden Gate Blvd	Wilson Blvd	Desoto Blvd	2014	Bid	2 to 4	Urban	5.71	2	11.42	$51,402,161	$4,501,065
Brevard	5	St. Johns Heritage Pkwy	SE of I-95 Intersection	US 192 (Space Coast Pkwy)	2014	Bid	0 to 2	Sub-Urb	3.11	2	6.22	$16,763,567	$2,695,107
Hillsborough	7	Turkey Creek Rd	Dr. MLK Blvd	Sydney Rd	2014	Bid	2 to 4	Urban	1.40	2	2.80	$3,166,000	$1,130,714
Sarasota	1	Bee Ridge Rd	Mauna Loa Blvd	Iona Rd	2014	Bid	2 to 4	Urban	2.68	2	5.36	$14,066,523	$2,624,351
Total									**Count:**	**71**	**348.92**	**$757,548,621**	**$2,171,124**
Clay County Improvements from Table B-4													**$2,769,250**
Average of County Database and Clay County Improvements (Rounded)													**$2,500,000**

Source: Roadway bids from recent impact fee studies throughout Florida as well as recent bids from the Tindale Oliver Cost Database, with information having been provided by each respective County

Table B-6
Urban/Rural-Design Cost Factor

Improvement	Construction Cost per Lane Mile		
	Rural Design	Urban Design	Ratio
0-2 Lanes	$2,650,303	$4,011,200	66%
0-4 Lanes	$2,160,916	$2,860,492	76%
0-6 Lanes	$1,833,574	$2,318,607	79%
2-4 Lanes	$3,135,005	$3,817,910	82%
4-6 Lanes	$3,494,392	$4,322,016	81%
Average	**$2,654,838**	**$3,466,045**	**77%**

Source: FDOT District 7 Long Range Estimates, 2016

Construction Engineering/Inspection

County Roadways

The CEI cost factor for county roads was estimated as a percentage of the construction cost per lane mile. This factor was determined through a review of the design-to-construction cost ratios from recently bid improvements in Clay County and from previously completed roadway impact fee studies throughout Florida. The CEI-to-construction cost ratio of the recent local improvements ranged from six (6) to 12 percent with a weighted average of eight (8) percent. For county roadways from throughout Florida, the CEI factors ranged from three (3) percent to 17 percent, with a weighted average of nine (9) percent. For purposes of this update study, the CEI cost for county roads was calculated at eight (8) percent of the construction cost per lane mile based on a review of the local data which is supported by CEI ratios observed in recent studies (see Tables B-7 and B-8 for additional information).

Table B-7
Construction Engineering/Inspection Cost per Lane Mile – Clay County Improvements

County	Description	From	To	Year	Feature	Design	Length	Lanes Added	Lane Miles Added	CEI Cost	CEI Cost per Lane Mile	Construction Cost	CEI/Constr. Ration
Local Projects													
Clay	Old Jennings Rd	SR 21	Brananfield Rd	2009	2 to 4	Urban	1.10	2	2.20	$581,637	$264,380	$4,807,479	12%
Clay	Henley	CR 218	Black Creek Bridge	2009	2 to 4	Urban	4.00	2	8.00	$1,758,264	$219,783	$22,737,553	8%
Clay	CR 209	Black Creek Bridge	CR 200	2009	2 to 4	Urban	0.95	2	1.90	$351,391	$184,943	$5,962,899	6%
Total									**12.10**	**$2,691,292**	**$222,421**	**$33,507,931**	**8%**

Source: Clay County Engineering and Public Works Department

Table B-8
Construction Engineering/Inspection Cost Factor – Recent Impact Fee Studies

Year	County	County Roadways (Cost per Lane Mile)		
		CEI	Constr.	CEI Ratio
2006	Collier	$294,054	$2,558,546	11%
2006	Citrus	$180,887	$2,584,099	7%
2007	Pasco	$215,534	$3,079,051	7%
2007	Lake	$116,441	$2,911,021	4%
2007	Flagler	$174,000	$1,740,000	10%
2007	Volusia	$238,660	$2,651,778	9%
2008	Leon	$372,400	$2,660,000	14%
2008	Sumter	$223,700	$2,237,000	10%
2009	Collier	$186,000	$3,100,000	6%
2009	Polk	$111,300	$1,590,000	7%
2009	Hillsborough/Tampa	$308,000	$2,800,000	11%
2010	Collier	$119,560	$1,708,000	7%
2011	Sarasota/North Port	$216,000	$2,400,000	9%
2012	Osceola	$265,140	$2,651,400	10%
2012	City of Sarasota	$216,000	$2,400,000	9%
2013	Hernando	$178,200	$1,980,000	9%
2013	Charlotte	$220,000	$2,200,000	10%
2014	Indian River	$143,000	$1,598,000	9%
2015	Collier	$270,000	$2,700,000	10%
2015	Brevard	$344,000	$2,023,000	17%
2015	Sumter	$147,000	$2,100,000	7%
2015	Marion	$50,000	$1,668,000	3%
2015	Palm Beach	$108,000	$1,759,000	6%
2016	Hillsborough	$261,000	$2,897,000	9%
2016	St. Lucie	$198,000	$2,200,000	9%
Average		**$206,275**	**$2,327,836**	**9%**

(a)

Source: Recent impact fee studies constructed throughout Florida
Note: Letter references (i.e., "a") are used to assist with footnotes and sourcing

Roadway Capacity

As shown in Table B-9, the average capacity per lane mile was based on the planned improvements projects in the Clay County 2040 Long Range Transportation Plan. This listing of projects reflects the mix of county roadway improvements that will yield the vehicle miles of capacity (VMC) that will be built in Clay County.

Table B-9
Clay County 2040 Long Range Transportation Plan – County Roadway Improvements

Jurisdiction	Description	From	To	Future Section Design	Improvement	Length (Miles)	Lanes Added	Lane Miles Added	Initial Capacity	Future Capacity	Added Capacity	Vehicle Miles of Capacity Added	VMC Added per Lane Mile
Cost Feasible Plan													
County	CR 218	Cosmos Ave	Pine Tree Ln	Urban	2 to 4 Lanes	2.60	2	5.20	15,930	35,820	19,890	51,714	9,945
County	CR 220 Doctors Inlet Rd	SR 21 Blanding Blvd	Knight Boxx Rd (end of 4-Lane)	Urban	2 to 4 Lanes	3.90	2	7.80	15,930	35,820	19,890	77,571	9,945
County	CR 220 Doctors Inlet Rd	College Dr	US 17	Urban	4 to 6 Lanes	4.30	2	8.60	15,930	35,820	19,890	85,527	9,945
County	Cheswick Oak Ave Extension	Oakleaf Plantation Pkwy	Savannah Glen Blvd	Urban	0 to 4 Lanes	3.10	4	12.40	0	35,820	35,820	111,042	8,955
County	CR 218	US 301	Cosmos Ave	Rural	2 to 4 Lanes	9.80	2	19.60	15,930	35,820	19,890	194,922	9,945
Needs Plan													
County	Baxley Rd	CR 220 Doctors Inlet Rd	SR 21 Blanding Blvd	Urban	2 to 4 Lanes	0.50	2	1.00	15,930	35,820	19,890	9,945	9,945
County	College Dr	CR 220 Doctors Inlet Rd	SR 21 Blanding Blvd	Urban	4 to 6 Lanes	2.60	4	10.40	35,820	53,910	18,090	47,034	4,523
County	College Dr Extension	SR 21 Blanding Blvd	Challenger Dr (Branan Field Rd)	Rural	0 to 4 Lanes	2.30	4	9.20	0	35,820	35,820	82,386	8,955
County	CR 209 Russell Rd	CR 739 Henley Rd	US 17	Urban	2 to 4 Lanes	7.30	2	14.60	15,930	35,820	19,890	145,197	9,945
County	CR 218	SR 21 Blanding Blvd	CR 739 Henley Rd	Urban	2 to 4 Lanes	4.50	2	9.00	15,930	35,820	19,890	89,505	9,945
County	CR 218	SR 16	CR 739 Henley Rd	Urban	2 to 4 Lanes	3.40	2	6.80	15,930	35,820	19,890	67,626	9,945
County	CR 218 Extension	CR 739 Henley Rd	SR 23 First Coast Expressway	Urban	0 to 4 Lanes	1.70	4	6.80	0	35,820	35,820	60,894	8,955
County	CR 218 Extension	SR 23 First Coast Expressway	CR 315	Urban	0 to 4 Lanes	3.00	4	12.00	0	35,820	35,820	107,460	8,955
County	CR 315	SR 16	CR 315B	Urban	2 to 4 Lanes	3.40	2	6.80	17,100	34,200	17,100	58,140	8,550
County	CR 315	CR 315B	US 17	Urban	2 to 4 Lanes	0.80	2	1.60	17,100	34,200	17,100	13,680	8,550
County	CR 739B Sandridge Rd	CR 739 Henley Rd	CR 209 Russell Rd	Urban	2 to 4 Lanes	3.70	2	7.40	17,100	34,200	17,100	63,270	8,550
County	Governors Park Rd	US 17	SR 16	Urban	0 to 4 Lanes	6.80	4	27.20	0	35,820	35,820	243,576	8,955
County	Knight Boxx Rd	CR 220 Doctors Inlet Rd	SR 21 Blanding Blvd	Urban	4 to 6 Lanes	1.20	2	2.40	35,820	53,910	18,090	21,708	9,045
County	Lake Asbury E/W 1	NS3	CR 209 Russell Rd	Rural	0 to 2 Lanes	2.80	2	5.60	0	15,930	15,930	44,604	7,965
County	Lake Asbury N/S Rd 3	CR 739B Sandridge Rd	CR 209 Russell Rd	Rural	0 to 2 Lanes	2.00	2	4.00	0	15,930	15,930	31,860	7,965
County	Long Bay Rd Extension North	Old Jennings Rd	Long Bay Rd	Urban	0 to 2 Lanes	0.40	2	0.80	0	17,100	17,100	6,840	8,550
County	Oakleaf Village Pkwy Extension	Oakleaf Plantation Pkwy	Oakleaf Village Pkwy	Urban	0 to 2 Lanes	0.80	2	1.60	0	15,930	15,930	12,744	7,965
County	Town Center Blvd	US 17	CR 220 Doctors Inlet Rd	Urban	2 to 4 Lanes	3.80	2	7.60	15,930	35,820	19,890	75,582	9,945
County	Tynes Rd	Pipit Pl	Oakleaf Plantation Pkwy	Urban	0 to 2 Lanes	1.60	2	3.20	0	15,930	15,930	25,488	7,965
County	Wells Rd	Aquarius Concourse	SR 21 Blanding Blvd	Urban	0 to 2 Lanes	0.50	2	1.00	0	14,040	14,040	7,020	7,020
Total (Cost Feasible and Needs Plan):						**76.80**		**192.60**	**266,310**	**806,760**	**540,450**	**1,735,335**	**9,010**
Total - Used in Impact Fee													**9,000**
Urban Design (Curb & Gutter)								154.20	80%	(a)		1,381,563	8,960
Rural Design (Open Drainage)								38.40	20%	(b)		353,772	9,213

Source: Clay County 2040 Long Range Transportation Plan, County Roadway Improvements
Note: Letter references (i.e., "a") are used to assist with footnotes and sourcing

Table B-10
Clay County – Needs Plan Network Improvements – Cost

Jurisdiction	Description	From	To	Improvement	Length (Miles)	Lanes Added	Lane Miles Added	Total Improvement Cost[1]
Cost Feasible Plan								
County	CR 218	Cosmos Ave	Pine Tree Ln	2 to 4 Lanes	2.60	2	5.20	$19,598,800
County	CR 220 Doctors Inlet Rd	SR 21 Blanding Blvd	CR 209	2 to 4 Lanes	2.82	2	5.64	$21,257,160
County	CR 220 Doctors Inlet Rd*	CR 209	Knight Boxx Rd (end of 4-Lane)	2 to 4 Lanes	1.08	2	2.16	$5,373,086
County	CR 220 Doctors Inlet Rd	College Dr	US 17	4 to 6 Lanes	4.30	2	8.60	$32,413,400
County	Cheswick Oak Ave Extension	Oakleaf Plantation Pkwy	Savannah Glen Blvd	0 to 4 Lanes	3.10	4	12.40	$46,735,600
County	CR 218	US 301	Cosmos Ave	2 to 4 Lanes	9.80	2	19.60	$73,872,400
Needs Plan								
County	Baxley Rd	CR 220 Doctors Inlet Rd	SR 21 Blanding Blvd	2 to 4 Lanes	0.50	2	1.00	$3,769,000
County	College Dr	CR 220 Doctors Inlet Rd	SR 21 Blanding Blvd	4 to 6 Lanes	2.60	4	10.40	$39,197,600
County	College Dr Extension	SR 21 Blanding Blvd	Challenger Dr (Branan Field Rd)	0 to 4 Lanes	2.30	4	9.20	$34,674,800
County	CR 209 Russell Rd	CR 739 Henley Rd	US 17	2 to 4 Lanes	7.30	2	14.60	$55,027,400
County	CR 218	SR 21 Blanding Blvd	CR 739 Henley Rd	2 to 4 Lanes	4.50	2	9.00	$33,921,000
County	CR 218	SR 16	CR 739 Henley Rd	2 to 4 Lanes	3.40	2	6.80	$25,629,200
County	CR 218 Extension	CR 739 Henley Rd	SR 23 First Coast Expressway	0 to 4 Lanes	1.70	4	6.80	$25,629,200
County	CR 218 Extension	SR 23 First Coast Expressway	CR 315	0 to 4 Lanes	3.00	4	12.00	$45,228,000
County	CR 315	SR 16	CR 315B	2 to 4 Lanes	3.40	2	6.80	$25,629,200
County	CR 315	CR 315B	US 17	2 to 4 Lanes	0.80	2	1.60	$6,030,400
County	CR 739B Sandridge Rd	CR 739 Henley Rd	CR 209 Russell Rd	2 to 4 Lanes	3.70	2	7.40	$27,890,600
County	Governors Park Rd	US 17	SR 16	0 to 4 Lanes	6.80	4	27.20	$102,516,800
County	Knight Boxx Rd	CR 220 Doctors Inlet Rd	SR 21 Blanding Blvd	4 to 6 Lanes	1.20	2	2.40	$9,045,600
County	Lake Asbury E/W 1	NS3	CR 209 Russell Rd	0 to 2 Lanes	2.80	2	5.60	$21,106,400
County	Lake Asbury N/S Rd 3	CR 739B Sandridge Rd	CR 209 Russell Rd	0 to 2 Lanes	2.00	2	4.00	$15,076,000
County	Long Bay Rd Extension North	Old Jennings Rd	Long Bay Rd	0 to 2 Lanes	0.40	2	0.80	$3,015,200
County	Oakleaf Village Pkwy Extension	Oakleaf Plantation Pkwy	Oakleaf Village Pkwy	0 to 2 Lanes	0.80	2	1.60	$6,030,400
County	Town Center Blvd	US 17	CR 220 Doctors Inlet Rd	2 to 4 Lanes	3.80	2	7.60	$28,644,400
County	Tynes Rd	Pipit Pl	Oakleaf Plantation Pkwy	0 to 2 Lanes	1.60	2	3.20	$12,060,800
County	Wells Rd	Aquarius Concourse	SR 21 Blanding Blvd	0 to 2 Lanes	0.50	2	1.00	$3,769,000
Total (Cost Feasible and Needs Plan):					**76.80**		**192.60**	**723,141,446**

1) Lane Miles Added multiplied by the estimated cost per lane mile from Table 2 ($3,769,000)

*CR 220 (from CR 209 to Knight Boxx Rd) is adjusted by 66% to account for existing deficiency (see Table B-11)

Project list from the 2040 Long Range Transportation Plan

Table B-11
Clay County – Needs Plan Network Improvements

Link ID	Description	Length (Miles)	Existing Lanes	Max Future Lanes	Existing Volume(1)	Future Volume(1)	VMT Added(2)	Existing Deficiency(3)
32	CR 214 to Putnam County Line	2.64	2	4	9,263	13,408	4,145	-
35	CR 209 from SR 21 to CR 220	1.37	4	4	6,420	12,026	5,606	-
36	CR 209 from CR 220 to CR 739	1.29	2	4	15,328	36,035	20,707	-
37	CR 209 from CR 739 to CR 739B	3.95	2	4	3,235	10,958	7,723	-
38	CR 209 from CR 739B to CR 315B	2.69	2	4	8,181	15,968	7,787	-
38.1	CR 209 from CR 315B to US 17	0.62	2	4	9,741	27,970	18,229	-
39	CR 218 from SR 16 to CR 739	3.35	2	4	4,299	20,359	16,060	-
40	CR 218 from CR 739 to Thunder Rd	2.48	2	4	6,601	21,639	15,038	-
40.A	CR 218 Extension	1.50	0	4	0	13,620	13,620	-
40.B	CR 218 Extention	2.76	0	4	0	12,172	12,172	-
41	CR 218 from Thunder Rd to SR 21	2.01	2	4	13,159	30,408	17,249	-
42	CR 218 from SR 21 to S. Mimosa Ave	2.05	2	4	15,108	28,388	13,280	-
43	CR 218 from S. Mimosa Ave to US 301	10.46	2	4	7,698	18,984	11,286	-
44	CR 220 from US 17 to W. Lake Shore Dr	2.08	4	6	32,629	37,682	5,053	-
45	CR 220 from W. Lake Shore Dr to Swim. Pen Creek Bridge	0.39	4	6	31,330	37,290	5,960	-
46	CR 220 from Swim. Pen Creek Bridge to College Dr	1.79	4	6	30,146	37,965	7,819	-
47	CR 220 from College Dr to Knight Boxx Rd	1.35	4	4	15,998	20,912	4,914	-
48	CR 220 from Knight Boxx Rd to CR 209	1.08	2	4	24,326	39,765	15,439	66%
48.1	CR 220 from CR 209 to Baxley Rd	1.27	2	4	13,448	23,358	9,910	-
49	CR 220 from Baxley Rd to SR 21	1.77	2	4	8,302	15,446	7,144	-
50	CR 220B (Knight Boxx Rd) from SR 21 to CR 220	1.18	4	6	16,697	23,603	6,906	-
51	CR 224 (College Dr) from SR 21 to CR 220A	1.58	4	6	21,056	31,464	10,408	-
51.A	CR 224 (College Dr) Extension	1.51	0	4	0	34,542	34,542	
52	CR 224 from CR 220A to CR 220	1.03	4	6	16,897	24,085	7,188	-
53	CR 315 from US 17 to CR 315B	0.79	2	4	2,383	22,142	19,759	-
53.1	CR 315 from CR 315B to US 16	3.37	2	4	2,887	22,048	19,161	-
53.2	CR 315B from CR 209 to CR 315	0.50	2	2	2,389	4,620	2,231	-
54	CR 739 from CR 209 to CR 739B	2.24	2	4	8,478	19,613	11,135	-
55	CR 739 from CR 739B to CR 218	1.10	2	4	4,921	21,270	16,349	-
56	CR 739B (Sandridge Rd) from CR 209 to CR 739	3.67	2	4	5,480	9,179	3,699	-
57	Doctors Lake Dr from Orange Park to Greenridge Rd	1.77	2	2	5,367	9,013	3,646	-
58	Doctors Lake Dr from Greenridge Rd to Peoria Rd	1.73	2	2	7,424	11,694	4,270	-
59	Moody Rd from Doctors Lake Dr to Suzanne Ave	1.68	2	2	10,292	11,893	1,601	-
60	Moody Rd from Suzanne Ave to Peoria Rd	1.97	2	2	9,842	14,893	5,051	-
61	Old Jennings Rd from SR 21 to SR 23	1.09	2	2	14,928	18,302	3,374	-
61.1	Old Jennings Rd from SR 23 to Long Bay Rd	2.02	0	2	9,583	18,707	9,124	-
62	Peoria Rd from College Dr to Moody Rd	0.24	2	2	12,308	21,549	9,241	-
63	Peoria Rd from Moody Rd to Doctors Lake Rd	0.61	2	2	4,813	8,982	4,169	-
64.A	Aquarius Concourse	0.43	2	2	8,011	11,682	3,671	-
65	Cheswick Oaks Ave from Duval County Line	0.94	2	2	13,859	20,521	6,662	-
65.A	Cheswick Oaks Ave	4.02	2	4	8,296	22,314	14,018	-
66	Baxley Rd from SR 21 to CR 220	0.48	2	4	6,661	16,438	9,777	-
67	Long Bay Rd from Old Jennings Rd to SR 21	2.53	2	2	3,964	13,062	9,098	-
99.A	Governors Park Rd	6.98	0	4	0	1,216	1,216	-
99.B	Lake Asbury E/W 1	2.90	0	2	0	856	856	-
99.C	Lake Asbury N/S 3	1.98	0	2	0	5,297	5,297	-
99.D	Long Bay Rd Extension	0.29	0	2	0	0	0	-
99.E	Oakleaf Village Plantation	1.71	0	2	0	13,982	13,982	-
99.F	Tynes Blvd	1.30	0	2	0	3,543	3,543	-
99.G	Fleming Plantation Blvd	3.04	0	4	0	3,347	3,347	-
Total					**451,748**	**914,207**	**462,459**	**-**

1) Source: Northeast Regional Planning Model v2
2) Future volume minus existing volume
3) Portion of the segment that is currently over capacity

Table B-12
Clay County – Needs Plan Network Improvements_Alternate – Cost

Jurisdiction	Description	From	To	Improvement	Length (Miles)	Lanes Added	Lane Miles Added	Total Improvement Cost[1]
Cost Feasible Plan								
County	CR 218	Cosmos Ave	Pine Tree Ln	2 to 4 Lanes	2.60	2	5.20	$19,598,800
County	CR 220 Doctors Inlet Rd	SR 21 Blanding Blvd	CR 209	2 to 4 Lanes	2.82	2	5.64	$21,257,160
County	CR 220 Doctors Inlet Rd*	CR 209	Knight Boxx Rd (end of 4-Lane)	2 to 6 Lanes	1.08	4	4.32	$13,025,664
County	CR 220 Doctors Inlet Rd	College Dr	US 17	4 to 6 Lanes	4.30	2	8.60	$32,413,400
County	Cheswick Oak Ave Extension	Oakleaf Plantation Pkwy	Savannah Glen Blvd	0 to 4 Lanes	3.10	4	12.40	$46,735,600
County	CR 218	US 301	Cosmos Ave	2 to 4 Lanes	9.80	2	19.60	$73,872,400
Needs Plan								
County	CR 209 Russell Rd	CR 315B	US 17	2 to 4 Lanes	0.62	2	1.24	$4,673,560
County	CR 218	SR 21 Blanding Blvd	CR 739 Henley Rd	2 to 4 Lanes	4.50	2	9.00	$33,921,000
County	CR 218	CR 739 Henley Rd	SR 16	2 to 4 Lanes	3.40	2	6.80	$25,629,200
County	CR 218 Extension	CR 739 Henley Rd	SR 23 First Coast Expressway	0 to 4 Lanes	1.70	4	6.80	$25,629,200
County	CR 218 Extension	SR 23 First Coast Expressway	CR 315	0 to 4 Lanes	3.00	4	12.00	$45,228,000
County	CR 315	CR 315B	US 17	2 to 4 Lanes	0.80	2	1.60	$6,030,400
County	Old Jennings Rd	SR 21 Blanding Blvd	SR 23	4 to 6 Lanes	1.04	2	2.08	$7,839,520
County	Old Jennings Rd	SR 23	Long Bay Rd	2 to 4 Lanes	2.02	2	4.04	$15,226,760
County	Peoria Rd	College Dr	Moody Rd	2 to 4 Lanes	0.25	2	0.50	$1,884,500
County	Cheswick Oaks Ave	Duval County Line	End of Pavement	2 to 4 Lanes	0.94	2	1.88	$7,085,720
Total (Cost Feasible and Needs Plan):					**41.97**		**101.70**	**$380,050,884**

1) Lane Miles Added multiplied by the estimated cost per lane mile from Table 2 ($3,769,000)
*CR 220 (from CR 209 to Knight Boxx Rd) is adjusted by 80% to account for existing deficiency (see Table B-13)
Project list based on alternative deficiency analysis of the 2040 model network

Table B-13
Clay County – Needs Plan Network Improvements_Alternate

Link ID	Description	Length (Miles)	Existing Lanes	Max Future Lanes	Existing Volume[(1)]	Future Volume[(1)]	VMT Added[(2)]	Existing Deficiency[(3)]
32	CR 214 to Putnam County Line	2.64	2	4	9,263	13,454	4,191	-
35	CR 209 from SR 21 to CR 220	1.37	4	4	6,420	16,120	9,700	-
36	CR 209 from CR 220 to CR 739	1.29	2	4	15,328	36,557	21,229	-
37	CR 209 from CR 739 to CR 739B	3.95	2	2	3,235	9,455	6,220	-
38	CR 209 from CR 739B to CR 315B	2.69	2	2	8,181	11,797	3,616	-
38.1	CR 209 from CR 315B to US 17	0.62	2	4	9,741	25,140	15,399	-
39	CR 218 from SR 16 to CR 739	3.35	2	4	4,299	19,718	15,419	-
40	CR 218 from CR 739 to Thunder Rd	2.48	2	4	6,601	17,958	11,357	-
40.A	CR 218 Extension	1.50	0	2	0	13,130	13,130	-
40.B	CR 218 Extention	2.76	0	2	0	12,410	12,410	-
41	CR 218 from Thunder Rd to SR 21	2.01	2	4	13,159	29,502	16,343	-
42	CR 218 from SR 21 to S. Mimosa Ave	2.05	2	4	15,108	29,598	14,490	-
43	CR 218 from S. Mimosa Ave to US 301	10.46	2	4	7,698	20,791	13,093	-
44	CR 220 from US 17 to W. Lake Shore Dr	2.08	4	6	32,629	38,804	6,175	-
45	CR 220 from W. Lake Shore Dr to Swim. Pen Creek Bridge	0.39	4	6	31,330	37,899	6,569	-
46	CR 220 from Swim. Pen Creek Bridge to College Dr	1.79	4	6	30,146	37,737	7,591	-
47	CR 220 from College Dr to Knight Boxx Rd	1.35	4	4	15,998	28,187	12,189	-
48	CR 220 from Knight Boxx Rd to CR 209	1.08	2	6	24,326	50,542	26,216	80%
48.1	CR 220 from CR 209 to Baxley Rd	1.27	2	4	13,448	27,198	13,750	-
49	CR 220 from Baxley Rd to SR 21	1.77	2	4	8,302	17,895	9,593	-
50	CR 220B (Knight Boxx Rd) from SR 21 to CR 220	1.18	4	4	16,697	21,872	5,175	-
51	CR 224 (College Dr) from SR 21 to CR 220A	1.58	4	4	21,056	25,485	4,429	-
52	CR 224 from CR 220A to CR 220	1.03	4	4	16,897	19,752	2,855	-
53	CR 315 from US 17 to CR 315B	0.79	2	4	2,383	18,448	16,065	-
53.1	CR 315 from CR 315B to US 16	3.37	2	2	2,887	17,119	14,232	-
53.2	CR 315B from CR 209 to CR 315	0.50	2	2	2,389	5,470	3,081	-
54	CR 739 from CR 209 to CR 739B	2.24	2	4	8,478	24,336	15,858	-
55	CR 739 from CR 739B to CR 218	1.10	2	4	4,921	25,144	20,223	-
56	CR 739B (Sandridge Rd) from CR 209 to CR 739	3.67	2	2	5,480	9,423	3,943	-
57	Doctors Lake Dr from Orange Park to Greenridge Rd	1.77	2	2	5,367	9,005	3,638	-
58	Doctors Lake Dr from Greenridge Rd to Peoria Rd	1.73	2	2	7,424	11,425	4,001	-
59	Moody Rd from Doctors Lake Dr to Suzanne Ave	1.68	2	2	10,292	11,891	1,599	-
60	Moody Rd from Suzanne Ave to Peoria Rd	1.97	2	2	9,842	14,511	4,669	-
61	Old Jennings Rd from SR 21 to SR 23	1.09	2	6	14,928	40,593	25,665	-
61.1	Old Jennings Rd from SR 23 to Long Bay Rd	2.02	2	4	9,583	30,846	21,263	-
62	Peoria Rd from College Dr to Moody Rd	0.24	2	4	12,308	19,922	7,614	-
63	Peoria Rd from Moody Rd to Doctors Lake Rd	0.61	2	2	4,813	8,373	3,560	-
64.A	Wells Rd	0.43	2	2	8,011	12,415	4,404	-
65	Cheswick Oaks Ave from Duval County Line	0.94	2	4	13,859	19,695	5,836	-
65.A	Cheswick Oaks Ave	4.02	2	4	8,296	11,726	3,430	-
66	Baxley Rd from SR 21 to CR 220	0.48	2	2	6,661	14,030	7,369	-
67	Long Bay Rd from Old Jennings Rd to SR 21	2.53	2	2	3,964	12,944	8,980	-
99.G	Towncenter Blvd	3.04	0	2	0	3,138	3,138	-
Total					**451,748**	**881,453**	**429,705**	-

1) Source: Northeast Regional Planning Model v2
2) Future volume minus existing volume
3) Portion of the segment that is currently over capacity

APPENDIX C
Credit Component Calculations

Appendix C: Credit Component

This appendix presents the detailed calculations for the credit component. County fuel taxes that are collected in Clay County are listed below, along with a few pertinent characteristics of each.

1. Constitutional Fuel Tax (2¢/gallon)

- Tax applies to every net gallon of motor and diesel fuel sold within a county. Collected in accordance with Article XII, Section 9 (c) of the Florida Constitution.
- The State allocated 80 percent of this tax to Counties after first withholding amounts pledged for debt service on bonds issued pursuant to provisions of the State Constitution for road and bridge purposes.
- The 20 percent surplus can be used to support the road construction program within the county.
- Counties are not required to share the proceeds of this tax with their municipalities.
- Clay County currently dedicates these revenues to operations/maintenance.

2. County Fuel Tax (1¢/gallon)

- Tax applies to every net gallon of motor and diesel fuel sold within a county.
- Primary purpose of these funds is to help reduce a County's reliance on ad valorem taxes.
- Proceeds are to be used for transportation-related expenses, including the reduction of bond indebtedness incurred for transportation purposes. Authorized uses include acquisition of rights-of-way; the construction, reconstruction, operation, maintenance, and repair of transportation facilities, roads, bridges, bicycle paths, and pedestrian pathways; or the reduction of bond indebtedness incurred for transportation purposes.
- Counties are not required to share the proceeds of this tax with their municipalities.
- Clay County currently dedicates these revenues to operations/maintenance.

3. Ninth-Cent Fuel Tax (1¢/gallon)

- Tax on every net gallon of motor fuel sold within a county.
- Proceeds may be used to fund transportation expenditures.
- To accommodate statewide equalization, this tax is automatically levied on diesel fuel in every county, regardless of whether a county is levying the tax on motor fuel at all.

- Counties are not required to share the proceeds of this tax with their municipalities.
- Clay County currently dedicates these revenues to operations/maintenance.

3. 1st Local Option Tax (up to 6¢/gallon)

- Tax applies to every net gallon of motor and diesel fuel sold within a county.
- Proceeds may be used to fund transportation expenditures.
- To accommodate statewide equalization, all six cents are automatically levied on diesel fuel in every county, regardless of whether a county is levying the tax on motor fuel at all or at the maximum rate.
- Proceeds are distributed to a county and its municipalities according to a mutually agreed upon distribution ratio, or by using a formula contained in the Florida Statutes.
- Clay County currently dedicates these revenues to operations/maintenance.

4. 2nd Local Option Tax (up to 5¢/gallon)

- Tax applies to every net gallon of motor and diesel fuel sold within a county.
- Proceeds may be used to fund transportation expenditures needed to meet requirements of the capital improvements element of an adopted Local Government Comprehensive Plan.
- Proceeds are distributed to a county and its municipalities according to a mutually agreed upon distribution scheme, or by using a formula contained in the Florida Statutes.
- Clay County adopted in August 2016 and goes into effect January 1, 2018. Proceeds will be dedicated to roadway capacity expansion.

Each year, the Florida Legislature's Office of Economic and Demographic Research (EDR) produces the *Local Government Financial Information Handbook*, which details the estimated local government revenues for the upcoming fiscal year. Included in this document are the estimated distributions of the various fuel tax revenues for each county in the state. The 2016-17 data represent projected fuel tax distributions to Clay County for the current fiscal year. Table C-1 shows the distribution per penny for each of the fuel levies, and then the calculation of the weighted average for the value of a penny of fuel tax. The weighting procedure takes into account the differing amount of revenues generated for the various types of fuel taxes. It is estimated that approximately $0.8 million of annual revenue will be generated for the County from one penny of gas tax in Clay County. This amount excludes the portion distributed to the municipalities.

Table C-1
Estimated Fuel Tax Distribution Allocated to Capital Programs for Clay County Board of County Commissioners, FY 2016-17[1]

Tax	Amount of Levy per Gallon	Total Distribution	Distribution per Penny
Constitutional Fuel Tax	$0.02	$2,036,548	$1,018,274
County Fuel Tax	$0.01	$896,330	$896,330
9th Cent Fuel Tax	$0.01	$915,292	$915,292
1st Local Option (1-6 cents)	$0.06	$4,417,536	$736,256
2nd Local Option (1-5 cents)	$0.05	$3,681,280	$736,256
Total	**$0.15**	**$11,946,986**	
Weighted Average per Penny[2]			**$796,466**

1) Source: Florida Legislature's Office of Economic and Demographic Research, http://edr.state.fl.us/content/local-government/reports/ -- excludes portion distributed to the municipalities
2) The weighted average distribution per penny is calculated by taking the sum of the total distribution and dividing that value by the sum of the total levies per gallon (multiplied by 100).

Capital Improvement Credit

A revenue credit for the annual expenditures on roadway capacity expansion projects in Clay County is presented below. The components of the credit are as follows:

- County capital project funding (cash funding)
- County debt service

The annual expenditures from each revenue source are converted to gas tax pennies to be able to create a connection between travel by each land use and non-impact fee revenue contributions.

County Capital Project Funding

A review of the County's future roadway financing programs indicate that a combination of infrastructure sales surtax revenue and sales tax bonds are used to fund roadway capacity expansion projects. As shown in Table C-2, Clay County uses 2.9 equivalent pennies for capacity expansion projects such as new road construction, lane additions, and intersection improvements.

Local Government Infrastructure Sales Surtax

It is important to note that the County's recent historical expenditures were also reviewed, which suggested that all capacity expansion improvements were funded exclusively with the Series 2009 Infrastructure Sales Surtax Revenue Bond.

Table C-2
County Fuel Tax Equivalent Pennies

Source	Cost of Projects	Number of Years	Revenue from 1 Penny[2]	Equivalent Pennies[3]
Projected CIP Expenditures (FY 2017-2021)[1]	$11,500,000	5	$796,466	$0.029
				$0.029

1) Source: Table C-4
2) Source: Table C-1
3) Cost of projects divided by number of years divided by revenue from 1 penny (Item 3) divided by 100

2nd Local Option Fuel Tax

In March 2017, Clay County adopted the five-cent 2nd local option fuel tax, which goes into effect January 1, 2018. Proceeds from this fuel tax are not eligible for maintenance improvements and all revenues will be available for capacity expansion improvements. Based on the current revenue estimates for the 1st LOFT, the five cents of 2nd LOFT will generate approximately 4.3 equivalent pennies per year for the County.

Debt Service

As previously mentioned, the County is currently using sales tax revenues to retire debt on the Series 2009 Infrastructure Sales Surtax Revenue Bond that was used to help fund capacity expansion improvements. The series 2009 surtax bond is scheduled to be paid off in full within the next two years. Currently, the County does not have plans to issue additional bonds for roadway capacity. As show in Table C-3, a credit of 11.4 pennies is calculated for outstanding debt service in Clay County.

Table C-3
County Debt Service Equivalent Pennies

Source	Cost of Projects	Number of Years	Revenue from 1 Penny[2]	Equivalent Pennies[3]
Infr. Sales Surtax Revenue Bond, Series 2009[1]	$18,165,408	2	$796,466	$0.114
Total				**$0.114**

1) Source: Table C-5
2) Source: Table C-1
3) Cost of projects divided by number of years divided by revenue from 1 penny (Item 3) divided by 100

Table C-4
Future Capital Improvement Expenditures for Clay County, FY 2017 to FY 2021

ID	Improvement	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
6031	CR 218 Widening from Astor to Cosmos	$7,500,000	$0	$0	$0	$0	**$7,500,000**
6064	Tynes Blvd Ext. - Non-Bond	$0	$1,000,000	$3,000,000	$0	$0	**$4,000,000**
Total		**$7,500,000**	**$1,000,000**	**$3,000,000**	**$0**	**$0**	**$11,500,000**

Source: Clay County FY 2016/17 Adopted Budget, Exhibit A

Table C-5
Series 2009 Infrastructure Sales Surtax Revenue Bond

Period Ending	Principal	Coupon	Interest	Debt Service	Annual Debt Service
4/1/2009		-	$558,229.86	$558,229.86	-
10/1/2009	$3,965,000	4.000%	$1,732,437.50	$5,697,437.50	$6,255,667.36
4/1/2010			$1,653,137.50	$1,653,137.50	-
10/1/2010	$6,155,000	4.000%	$1,653,137.50	$7,808,137.50	$9,461,275.00
4/1/2011			$1,530,037.50	$1,530,037.50	-
10/1/2011	$6,400,000	**	$1,530,037.50	$7,930,037.50	$9,460,075.00
4/1/2012			$1,384,537.50	$1,384,537.50	-
10/1/2012	$6,690,000	5.000%	$1,384,537.50	$8,074,537.50	$9,459,075.00
4/1/2013			$1,217,287.50	$1,217,287.50	-
10/1/2013	$7,025,000	5.000%	$1,217,287.50	$8,242,287.50	$9,459,575.00
4/1/2014			$1,041,662.50	$1,041,662.50	-
10/1/2014	$7,380,000	5.000%	$1,041,662.50	$8,421,662.50	$9,463,325.00
4/1/2015			$857,162.50	$857,162.50	-
10/1/2015	$7,745,000	5.000%	$857,162.50	$8,602,162.50	$9,459,325.00
4/1/2016			$663,537.50	$663,537.50	-
10/1/2016	$8,135,000	5.000%	$663,537.50	$8,798,537.50	$9,462,075.00
4/1/2017			$460,162.50	$460,162.50	-
10/1/2017	$8,540,000	5.250%	$460,162.50	$9,000,162.50	$9,460,325.00
4/1/2018			$235,987.50	$235,987.50	-
10/1/2018	$8,990,000	5.250%	$235,987.50	$9,225,987.50	$9,461,975.00
Totals	**$71,025,000**	**4.833%**	**$20,377,692.36**	**$91,402,692.36**	**$91,402,692.36**
Total Remaining (2017-2018)					**$18,922,300**
Percent for Transportation Capacity					**96%**
Portion for Transportation Capacity					**$18,165,408**
Payments Remaining (2017-2018)					**2**

Source: Clay County Finance Department

Table C-6
Average Motor Vehicle Fuel Efficiency – Excluding Interstate Travel

Travel Vehicle Miles of Travel (VMT) @			
	22.0	6.4	
Other Arterial Rural	307,948,000,000	44,807,000,000	352,755,000,000
Other Rural	301,199,000,000	29,717,000,000	330,916,000,000
Other Urban	1,517,331,000,000	89,461,000,000	1,606,792,000,000
Total	***2,126,478,000,000***	***163,985,000,000***	***2,290,463,000,000***

Percent VMT	
@ 22.0 mpg	@ 6.4 mpg
87%	13%
91%	9%
94%	6%
93%	**7%**

Fuel Consumed			
	Gallons @ 22.0 mpg	Gallons @ 6.4 mpg	
Other Arterial Rural	13,997,636,364	7,001,093,750	20,998,730,114
Other Rural	13,690,863,636	4,643,281,250	18,334,144,886
Other Urban	68,969,590,909	13,978,281,250	82,947,872,159
Total	***96,658,090,909***	***25,622,656,250***	***122,280,747,159***

Total Mileage and Fuel	
2,290,463	**miles (millions)**
122,281	**gallons (millions)**
18.73	**mpg**

Source: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics 2015* , Section V, Table VM-1
Annual Vehicle Distance Traveled in Miles and Related Data - 2015 by Highway Category and Vehicle Type
http://www.fhwa.dot.gov/policyinformation/statistics.cfm

Source: See Table C-7

Table C-7
Annual Vehicle Distance Traveled in Miles and Related Data (2015) - By Highway Category and Vehicle Type[1/]

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YEAR	ITEM	LIGHT DUTY VEHICLES SHORT WB[(2)]	MOTOR-CYCLES	BUSES[(6)]	LIGHT DUTY VEHICLES LONG WB[(2)]	SINGLE-UNIT TRUCKS[(3)]	COMBINATION TRUCKS	SUBTOTALS		ALL MOTOR VEHICLES
								ALL LIGHT VEHICLES[(2)]	SINGLE-UNIT 2-AXLE 6-TIRE OR MORE AND COMBINATION TRUCKS	
	Motor-Vehicle Travel: (millions of vehicle-miles)									
2015	Interstate Rural	133,747	1,185	1,643	42,100	9,623	47,468	**175,847**	**57,091**	235,766
2015	Other Arterial Rural	221,643	2,710	1,966	86,304	16,171	28,636	**307,948**	**44,807**	357,431
2015	Other Rural	212,993	2,790	2,002	88,206	16,174	13,543	**301,199**	**29,717**	335,708
2015	All Rural	568,383	6,685	5,611	216,610	41,967	89,648	784,993	131,615	928,905
2015	Interstate Urban	383,245	2,530	2,521	94,124	17,540	41,227	**477,369**	**58,767**	541,186
2015	Other Urban	1,196,213	10,391	8,098	321,118	50,089	39,372	**1,517,331**	**89,461**	1,625,282
2015	All Urban	1,579,458	12,921	10,619	415,242	67,630	80,599	1,994,700	148,228	2,166,468
2015	Total Rural and Urban[(5)]	2,147,840	19,606	16,230	631,852	109,597	170,246	2,779,693	279,844	3,095,373
2015	Number of motor vehicles registered[(2)]	189,618,308	8,600,936	888,907	53,298,884	8,456,302	2,746,882	242,917,192	11,203,184	263,610,219
2015	Average miles traveled per vehicle	11,327	2,280	18,258	11,855	12,960	61,978	11,443	24,979	11,742
2015	Person-miles of travel[(4)] (millions)	2,984,178	21,118	344,073	844,123	109,597	170,246	3,828,301	279,844	4,473,336
2015	Fuel consumed (thousand gallons)	90,017,583	447,879	2,228,059	36,436,054	14,850,153	28,884,134	126,453,637	43,734,287	172,863,862
2015	Average fuel consumption per vehicle (gallons)	475	52	2,507	684	1,756	10,515	521	3,904	656
2015	Average miles traveled per gallon of fuel consumed	23.9	43.8	7.3	17.3	7.4	5.9	**22.0**	**6.4**	17.9

(1) The FHWA estimates national trends by using State reported Highway Performance and Monitoring System (HPMS) data, fuel consumption data (MF-21 and MF-27), vehicle registration data (MV-1, MV-9, and MV-10), other data such as the R.L. Polk vehicle data, and a host of modeling techniques. Starting with the 2009 VM-1, an enhanced methodology was used to provide timely indicators on both travel and travel behavior changes.

(2) Light Duty Vehicles Short WB - passenger cars, light trucks, vans and sport utility vehicles with a wheelbase (WM) equal to or less than 121 inches. Light Duty Vehicles Long WB - large passenger cars, vans, pickup trucks, and sport/utility vehicles with wheelbases (WB) larger than 121 inches. All Light Duty Vehicles - passenger cars, light trucks, vans and sport utility vehicles regardless of

(3) Single-Unit - single frame trucks that have 2-Axles and at least 6 tires or a gross vehicle weight rating exceeding 10,000 lbs.

(4) Vehicle occupancy is estimated by the FHWA from the 2009 National Household Travel Survey (NHTS); For single unit truck and heavy trucks, 1 motor vehicle mile travelled = 1 person-mile traveled.

(5) VMT data are based on the latest HPMS data available; it may not match previous published results.

(6) The change in the number of buses is primarily due to the decline of reported public operated school buses.

APPENDIX D
Calculated Roadway Impact Fee Schedule

Appendix D: Roadway Impact Fee Schedule

This appendix presents the detailed impact fee calculations for each land use in Clay County's roadway impact fee schedule.

- Table D-1: Summary of calculated impact fee rates for consumption-based and needs-based scenarios
- Table D-2: Detailed fee calculations – Consumption-Based, V/C 0.46
- Table D-3: Detailed fee calculations – Consumption-Based, V/C 0.48
- Table D-4: Detailed fee calculations – Consumption-Based, V/C 0.56
- Table D-5: Detailed fee calculations – Consumption-Based, V/C 1.00
- Table D-6: Detailed fee calculations – Needs-Based
- Table D-7: Detailed fee calculations – Needs-Based_Alternative

Table D-1
Calculated Roadway Impact Fee Schedule – Summary

ITE LUC	Land Use	Unit	Consumption V/C 0.46[1]	Consumption V/C 0.48[2]	Consumption V/C 0.56[3]	Consumption V/C 1.00[4]	Needs[5]	Needs Alternative[6]
	RESIDENTIAL:							
210	Single Family (Detached); less than 1,500 sf & very low income	du	$2,959	$2,824	$2,382	$1,214	$4,442	$1,914
	Single Family (Detached); less than 1,500 sf & low income	du	$4,445	$4,242	$3,578	$1,824	$6,670	$2,875
	Single Family (Detached); less than 1,500 sf	du	$6,718	$6,413	$5,410	$2,764	$10,062	$4,336
	Single Family (Detached); 1,500 to 2,499 sf	**du**	**$8,417**	**$8,035**	**$6,778**	**$3,461**	**$12,614**	**$5,436**
	Single Family (Detached); 2,500 sf or larger	du	$9,507	$9,076	$7,656	$3,910	$14,246	$6,140
220	Multi-Family (Apartment)	du	$5,469	$5,220	$4,401	$2,242	$8,213	$3,539
230	Residential Condominium/Townhouse	du	$4,768	$4,551	$3,837	$1,952	$7,167	$3,089
240	Mobile Home Park	du	$3,112	$2,970	$2,504	$1,273	$4,680	$2,017
253	Assisted Living/Congregate Care Facility	du	$809	$772	$651	$330	$1,218	$525
260	Recreational Home/Vehicle	du	$3,403	$3,248	$2,740	$1,397	$5,104	$2,200
	LODGING:							
310	Hotel	room	$4,232	$4,039	$3,407	$1,737	$6,350	$2,737
320	Motel	room	$3,049	$2,910	$2,453	$1,245	$4,590	$1,978
	RECREATION:							
430	Golf Course[7]	1,000 sf	$13,788	$13,155	$11,072	$5,575	$20,903	$9,009
		hole	$34,665	$33,090	$27,915	$14,252	$51,954	$22,391
491	Racquet Club	1,000 sf	$11,042	$10,540	$8,889	$4,531	$16,571	$7,142
	INSTITUTIONS:							
520	Elementary School (Private)	1,000 sf	$8,606	$8,213	$6,923	$3,518	$12,950	$5,581
522	Middle School (Private)	1,000 sf	$8,650	$8,256	$6,960	$3,538	$13,011	$5,608
530	High School (Private)	1,000 sf	$8,095	$7,726	$6,513	$3,313	$12,171	$5,245
540	University (7,500 or fewer students)	student	$1,940	$1,852	$1,563	$798	$2,907	$1,253
550	University (more than 7,500 students)	student	$1,451	$1,384	$1,167	$594	$2,181	$940
560	Place of Worship	1,000 sf	$5,189	$4,952	$4,175	$2,123	$7,802	$3,362
565	Day Care Center	1,000 sf	$17,098	$16,310	$13,721	$6,887	$25,989	$11,201
610	Hospital	1,000 sf	$10,968	$10,470	$8,832	$4,508	$16,442	$7,086
620	Nursing Home	1,000 sf	$2,819	$2,689	$2,264	$1,140	$4,274	$1,842
	OFFICE:							
710	General Office 50,000 sf or less	1,000 sf	$11,929	$11,386	$9,601	$4,889	$17,918	$7,722
	General Office 50,001-100,000 sf	1,000 sf	$10,109	$9,649	$8,137	$4,145	$15,178	$6,542
	General Office 100,001-200,000 sf	1,000 sf	$8,555	$8,165	$6,885	$3,504	$12,854	$5,540
	General Office 200,001-400,000 sf	1,000 sf	$7,252	$6,922	$5,839	$2,978	$10,878	$4,688
	General Office greater than 400,000 sf	1,000 sf	$6,579	$6,280	$5,296	$2,700	$9,872	$4,255
720	Medical Office	1,000 sf	$19,141	$18,271	$15,410	$7,857	$28,719	$12,378
750	Office Park	1,000 sf	$12,053	$11,506	$9,706	$4,956	$18,064	$7,785
760	Research & Development Center	1,000 sf	$6,311	$6,023	$5,080	$2,588	$9,474	$4,083
	RETAIL:							
813	Discount Superstore, Free-Standing	1,000 sf	$13,161	$12,557	$10,571	$5,327	$19,938	$8,593
815	Discount Store, Free-Standing	1,000 sf	$14,818	$14,137	$11,900	$5,994	$22,457	$9,678
816	Hardware/Paint Store	1,000 sf	$8,600	$8,203	$6,897	$3,451	$13,105	$5,648
817	Nursery (Garden Center)	1,000 sf	$11,432	$10,905	$9,171	$4,596	$17,399	$7,499
818	Nursery (Wholesale)	1,000 sf	$6,549	$6,247	$5,255	$2,634	$9,965	$4,294
820	Retail 200,000 gsf or less	1,000 sfgla	$13,788	$13,155	$11,072	$5,575	$20,903	$9,009
	Retail 200,001-400,000 gsf	1,000 sfgla	$12,996	$12,400	$10,442	$5,273	$19,654	$8,470
	Retail greater than 400,000 gsf	1,000 sfgla	$12,777	$12,192	$10,269	$5,193	$19,302	$8,319

Table D-1 (continued)
Calculated Roadway Impact Fee Schedule – Summary

ITE LUC	Land Use	Unit	Consumption V/C 0.46[(1)]	Consumption V/C 0.48[(2)]	Consumption V/C 0.56[(3)]	Consumption V/C 1.00[(4)]	Needs[(5)]	Needs Alternative[(6)]
	RETAIL:							
848	Tire Store	1,000 sf	$10,494	$10,015	$8,440	$4,280	$15,815	$6,816
857	Discount Club	1,000 sf	$10,822	$10,325	$8,691	$4,379	$16,399	$7,067
863	Electronics Superstore	1,000 sf	$7,556	$7,207	$6,061	$3,035	$11,508	$4,959
880/881	Pharmacy with or without Drive-Thru	1,000 sf	$10,249	$9,776	$8,224	$4,126	$15,583	$6,716
890	Furniture Store	1,000 sf	$2,702	$2,579	$2,175	$1,107	$4,060	$1,749
944/946	Service Station with or without Car Wash	fuel pos.	$11,018	$10,510	$8,839	$4,428	$16,774	$7,230
947	Car Wash, Self-Service	bay	$10,471	$9,990	$8,407	$4,227	$15,892	$6,849
	INDUSTRIAL:							
140	Manufacturing	1,000 sf	$2,940	$2,806	$2,366	$1,205	$4,416	$1,903
150	Warehouse	1,000 sf	$2,740	$2,616	$2,206	$1,123	$4,115	$1,774
151	Mini-Warehouse	1,000 sf	$956	$912	$768	$387	$1,447	$624

1) Source: Table D-2
2) Source: Table D-3
3) Source: Table D-4
4) Source: Table D-5
5) Source: Table D-6
6) Source: Table D-7
7) If there are <46,000 sq ft of ancillary structures, golf course should be charged per 1,000 sq ft. The "per 1,000 sq ft" rate corresponds to the calculated rate for Retail <200,000 sq ft. If >46,000 sq ft, charge per hole

DRAFT

Table D-2
Calculated Roadway Impact Fee Schedule – Consumption-Based, V/C 0.46

	Sales/Fuel Tax	Debt				
$ per Gallon to Capital:	$0.072	0.114	Unit Cost per Lane Mile:	$3,769,000		
Facility Life (Years):	25	2	Average VMC per Lane Mile:	4,140	Cost per VMC:	$910.39
Interest Rate:	3.50%		Fuel Efficiency:	18.73 mpg	County Adjustment Factor:	39.0%
			Effective Days per Year:	365		

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length	Total Trip Length	Trip Length Source	Percent New Trips	% New Trips Source	Net VMT[1]	Total Impact Cost	Annual Cap. Imp. Credit	Cap. Imp. Credit	Annual Debt Credit	Debt Service Credit	Total Credit[2]	Net Impact Fee	Current Impact Fee (District 2)	% Change
	RESIDENTIAL:																		
210	Single Family (Detached); less than 1,500 sf and very low income	du	2.75	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	3.55	$3,232	$14	$231	$22	$42	$273	**$2,959**	$4,341	-32%
	Single Family (Detached); less than 1,500 sf and low income	du	4.13	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	5.33	$4,854	$21	$346	$33	$63	$409	**$4,445**	$4,341	2%
	Single Family (Detached); less than 1,500 sf	du	6.23	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	8.04	$7,322	$31	$511	$49	$93	$604	**$6,718**	$4,341	55%
	Single Family (Detached); 1,500 to 2,499 sf	du	7.81	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	10.08	$9,178	$39	$643	$62	$118	$761	**$8,417**	$4,341	94%
	Single Family (Detached); 2,500 sf or larger	du	8.82	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	11.39	$10,365	$44	$725	$70	$133	$858	**$9,507**	$4,341	119%
220	Multi-Family (Apartment)	du	6.60	Blend ITE 9th & FL Studies	5.10	5.60	FL Studies (LUC 220/230)	100%	n/a	6.56	$5,976	$26	$429	$41	$78	$507	**$5,469**	$3,048	79%
230	Residential Condominium/Townhouse	du	5.76	Blend ITE 9th & FL Studies	5.10	5.60	FL Studies (LUC 220/230)	100%	n/a	5.73	$5,215	$23	$379	$36	$68	$447	**$4,768**	$3,048	56%
240	Mobile Home Park	du	4.17	FL Studies	4.60	5.10	FL Studies	100%	n/a	3.74	$3,405	$15	$247	$24	$46	$293	**$3,112**	$2,658	17%
253	Assisted Living/Congregate Care Facility	du	2.25	Blend ITE 9th & FL Studies	3.08	3.58	FL Studies	72%	FL Studies	0.97	$886	$4	$66	$6	$11	$77	**$809**	-	-
260	Recreational Home/Vehicle	du	3.16	ITE 9th Edition	6.62	7.12	Same as LUC 210	100%	n/a	4.08	$3,714	$16	$264	$25	$47	$311	**$3,403**	$1,433	138%
	LODGING:																		
310	Hotel	room	6.30	Blend ITE 9th & FL Studies	6.26	6.76	FL Studies	66%	FL Studies	5.08	$4,621	$20	$330	$31	$59	$389	**$4,232**	$1,878	125%
320	Motel	room	5.63	ITE 9th Edition	4.34	4.84	FL Studies	77%	FL Studies	3.67	$3,340	$15	$247	$23	$44	$291	**$3,049**	$1,878	62%
	RECREATION:																		
430	Golf Course[3]	hole	35.74	ITE 9th Edition	6.62	7.12	Same as LUC 210	90%	FL Studies (Pinellas County)	41.52	$37,802	$161	$2,654	$254	$483	$3,137	**$34,665**	$9,781	254%
491	Racquet Club	1,000 sf	14.03	ITE 9th Edition	5.15	5.65	Same as LUC 710	94%	Same as LUC 492 (Appendix A)	13.24	$12,057	$52	$857	$83	$158	$1,015	**$11,042**	$4,616	139%
	INSTITUTIONS:																		
520	Elementary School (Private)	1,000 sf	15.43	ITE 9th Edition	4.30	4.80	FL Studies (Pinellas County)	80%	FL Studies (Pinellas County)	10.35	$9,423	$42	$692	$66	$125	$817	**$8,606**	$789	991%
522	Middle School (Private)	1,000 sf	13.78	ITE 9th Edition	4.30	4.80	FL Studies (Pinellas County)	90%	FL Studies (Pinellas County)	10.40	$9,467	$42	$692	$66	$125	$817	**$8,650**	-	-
530	High School (Private)	1,000 sf	12.89	ITE 9th Edition	4.30	4.80	FL Studies (Pinellas County)	90%	FL Studies (Pinellas County)	9.73	$8,856	$39	$643	$62	$118	$761	**$8,095**	$1,500	440%
540	University (7,500 or fewer students)	student	2.00	ITE Regression Analysis	6.62	7.12	Same as LUC 210	90%	FL Studies (Pinellas County)	2.32	$2,115	$9	$148	$14	$27	$175	**$1,940**	-	-
550	University (more than 7,500 students)	student	1.50	ITE Regression Analysis	6.62	7.12	Same as LUC 210	90%	FL Studies (Pinellas County)	1.74	$1,587	$7	$115	$11	$21	$136	**$1,451**	-	-
560	Place of Worship	1,000 sf	9.11	ITE 9th Edition	3.90	4.40	FL Studies (Pinellas County)	90%	FL Studies (Pinellas County)	6.24	$5,677	$25	$412	$40	$76	$488	**$5,189**	$2,339	122%
565	Day Care Center	1,000 sf	71.88	Blend ITE 9th & FL Studies	2.03	2.53	FL Studies	73%	FL Studies	20.77	$18,910	$93	$1,533	$147	$279	$1,812	**$17,098**	$1,488	1049%

Table D-2 (continued)
Calculated Roadway Impact Fee Schedule – Consumption-Based, V/C 0.46

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length	Total Trip Length	Trip Length Source	Percent New Trips	% New Trips Source	Net VMT[1]	Total Impact Cost	Annual Cap. Imp. Credit	Cap. Imp. Credit	Annual Debt Credit	Debt Service Credit	Total Credit[2]	Net Impact Fee	Current Impact Fee (District 2)	% Change
	INSTITUTIONS:																		
610	Hospital	1,000 sf	13.22	ITE 9th Edition	6.62	7.12	Same as LUC 210	77%	FL Studies (Pinellas County)	13.14	$11,963	$51	$841	$81	$154	$995	**$10,968**	$3,595	205%
620	Nursing Home	1,000 sf	7.60	ITE 9th Edition	2.59	3.09	FL Studies	89%	FL Studies	3.42	$3,110	$15	$247	$23	$44	$291	**$2,819**	$3,825	-26%
	OFFICE:																		
710	General Office 50,000 sf or less[4]	1,000 sf	15.50	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	14.32	$13,037	$57	$939	$89	$169	$1,108	**$11,929**	$2,824	322%
	General Office 50,001-100,000 sf[4]	1,000 sf	13.13	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	12.13	$11,044	$48	$791	$76	$144	$935	**$10,109**	$2,824	258%
	General Office 100,001-200,000 sf[4]	1,000 sf	11.12	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	10.27	$9,353	$41	$676	$64	$122	$798	**$8,555**	$2,824	203%
	General Office 200,001-400,000 sf[4]	1,000 sf	9.41	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	8.69	$7,915	$34	$560	$54	$103	$663	**$7,252**	$2,824	157%
	General Office greater than 400,000 sf[4]	1,000 sf	8.54	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	7.89	$7,183	$31	$511	$49	$93	$604	**$6,579**	$2,824	133%
720	Medical Office	1,000 sf	23.83	FL Studies	5.55	6.05	FL Studies	89%	FL Studies	22.95	$20,896	$90	$1,483	$143	$272	$1,755	**$19,141**	$3,241	491%
750	Office Park	1,000 sf	11.70	Blend ITE 9th & FL Studies	7.11	7.61	FL Studies	89%	Same as LUC 770 (Appendix A)	14.44	$13,143	$56	$923	$88	$167	$1,090	**$12,053**	$3,417	253%
760	Research & Development Center	1,000 sf	8.11	ITE 9th Edition	5.38	5.88	Same as LUC 770 (Appendix A)	89%	Same as LUC 770 (Appendix A)	7.57	$6,894	$30	$494	$47	$89	$583	**$6,311**	$2,427	160%
	RETAIL:																		
813	Discount Superstore, Free-Standing	1,000 sf	50.82	Blend ITE 9th & FL Studies	2.40	2.90	Same as LUC 820 (50k-200k sq ft)	67%	Same as LUC 820 (50k-200k sq ft)	15.94	$14,507	$69	$1,137	$110	$209	$1,346	**$13,161**	$6,357	107%
815	Discount Store, Free-Standing	1,000 sf	57.24	ITE 9th Edition	2.40	2.90	Same as LUC 820 (50k-200k sq ft)	67%	Same as LUC 820 (50k-200k sq ft)	17.95	$16,340	$78	$1,286	$124	$236	$1,522	**$14,818**	$9,648	54%
816	Hardware/Paint Store	1,000 sf	51.29	ITE 9th Edition	1.87	2.37	Same as LUC 820 (<50k sq ft)	56%	Same as LUC 820 (<50k sq ft)	10.47	$9,535	$48	$791	$76	$144	$935	**$8,600**	$4,417	95%
817	Nursery (Garden Center)	1,000 sf	68.10	ITE 9th Edition	1.87	2.37	Same as LUC 820 (<50k sq ft)	56%	Same as LUC 820 (<50k sq ft)	13.91	$12,660	$63	$1,038	$100	$190	$1,228	**$11,432**	$2,589	342%
818	Nursery (Wholesale)	1,000 sf	39.00	ITE 9th Edition	1.87	2.37	Same as LUC 820 (<50k sq ft)	56%	Same as LUC 820 (<50k sq ft)	7.96	$7,250	$36	$593	$57	$108	$701	**$6,549**	$2,799	134%
820	Retail 200,000 gsf or less[4]	1,000 sfgla	53.28	ITE 9th equation	2.40	2.90	TL Regression	67%	FL Curve	16.71	$15,209	$73	$1,203	$115	$218	$1,421	**$13,788**	$3,698	273%
	Retail 200,001-400,000 gsf[4]	1,000 sfgla	41.80	ITE 9th equation	2.64	3.14	TL Regression	73%	FL Curve	15.71	$14,301	$67	$1,104	$106	$201	$1,305	**$12,996**	$3,698	251%
	Retail greater than 400,000 gsf[4]	1,000 sfgla	36.27	ITE 9th equation	2.87	3.37	TL Regression	76%	FL Curve	15.43	$14,044	$65	$1,071	$103	$196	$1,267	**$12,777**	$3,698	246%
848	Tire Store	1,000 sf	24.87	ITE 9th Edition	3.62	4.12	Same as LUC 942 (Appendix A)	72%	Same as LUC 942 (Appendix A)	12.64	$11,507	$52	$857	$82	$156	$1,013	**$10,494**	$2,682	291%
857	Discount Club	1,000 sf	41.80	ITE 9th Edition	2.40	2.90	Same as LUC 820 (50k-200k sq ft)	67%	Same as LUC 820 (50k-200k sq ft)	13.11	$11,932	$57	$939	$90	$171	$1,110	**$10,822**	$9,599	13%
863	Electronics Superstore	1,000 sf	45.04	ITE 9th Edition	1.87	2.37	Same as LUC 820 (<50k sq ft)	56%	Same as LUC 820 (<50k sq ft)	9.20	$8,373	$42	$692	$66	$125	$817	**$7,556**	$10,343	-27%
880/881	Pharmacy with or without Drive-Thru	1,000 sf	95.96	Blend ITE 9th & FL Studies	2.08	2.58	FL Studies	32%	FL Studies	12.45	$11,339	$56	$923	$88	$167	$1,090	**$10,249**	$6,327	62%
890	Furniture Store	1,000 sf	5.06	ITE 9th Edition	6.09	6.59	FL Studies	54%	FL Studies	3.24	$2,954	$13	$214	$20	$38	$252	**$2,702**	$1,452	86%

Table D-2 (continued)
Calculated Roadway Impact Fee Schedule – Consumption-Based, V/C 0.46

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length	Total Trip Length	Trip Length Source	Percent New Trips	% New Trips Source	Net VMT[1]	Total Impact Cost	Annual Cap. Imp. Credit	Cap. Imp. Credit	Annual Debt Credit	Debt Service Credit	Total Credit[2]	Net Impact Fee	Current Impact Fee (District 2)	% Change
	RETAIL:																		
944/946	Service Station with or without Car Wash	fuel pos.	157.33	ITE 9th Edition (944 & 946 Blend)	1.90	2.40	FL Studies	23%	FL Studies	13.41	$12,205	$61	$1,005	$96	$182	$1,187	**$11,018**	$3,024	264%
947	Car Wash, Self-Service	bay	43.94	Blend ITE 9th & FL Studies	2.18	2.68	FL Studies	68%	FL Studies	12.70	$11,563	$56	$923	$89	$169	$1,092	**$10,471**	-	-
	INDUSTRIAL:																		
140	Manufacturing	1,000 sf	3.82	ITE 9th Edition	5.15	5.65	Same as LUC 710	92%	Same as LUC 710	3.53	$3,213	$14	$231	$22	$42	$273	**$2,940**	$1,839	60%
150	Warehouse	1,000 sf	3.56	ITE 9th Edition	5.15	5.65	Same as LUC 710	92%	Same as LUC 710	3.29	$2,994	$13	$214	$21	$40	$254	**$2,740**	$2,387	15%
151	Mini-Warehouse	1,000 sf	2.08	Blend ITE 9th & FL Studies	3.10	3.60	FL Studies (Pinellas County)	92%	Same as LUC 710	1.16	$1,053	$5	$82	$8	$15	$97	**$956**	$722	32%

1) Net VMT calculated as ((Trip Generation Rate* Trip Length* % New Trips)*(1-Interstate/Toll Facility Adjustment Factor)/2). This reflects the unit of vehicle miles of capacity consumed per unit of development and is multiplied by the cost per vehicle
2) Sum of the capital improvement credit and the debt service credit
3) This rate should only be used if the golf course facility has more than 46,000 sq ft of ancillary structures. If not, use the "Retail <200,000 sq ft" rate.
4) The trip generation rates recommended for retail use an end-point regression value

*Average VMC per Lane Mile from Table 3 (9,000) adjusted by a factor of 0.46 (9,000 * 0.46 = 4,140)

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Table D-3
Calculated Roadway Impact Fee Schedule – Consumption-Based, V/C 0.48

	Sales/Fuel Tax	Debt				
$$ per Gallon to Capital:	$0.072	0.114	Unit Cost per Lane Mile:	$3,769,000		
Facility Life (Years):	25	2	Average VMC per Lane Mile:	4,320	Cost per VMC:	$872.45
Interest Rate:	3.50%		Fuel Efficiency:	18.73 mpg	County Adjustment Factor:	39.0%
			Effective Days per Year:	365		

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length	Total Trip Length	Trip Length Source	Percent New Trips	% New Trips Source	Net VMT[1]	Total Impact Cost	Annual Cap. Imp. Credit	Cap. Imp. Credit	Annual Debt Credit	Debt Service Credit	Total Credit[2]	Net Impact Fee	Current Impact Fee (District 2)	% Change
	RESIDENTIAL:																		
210	Single Family (Detached); less than 1,500 sf and very low income	du	2.75	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	3.55	$3,097	$14	$231	$22	$42	$273	**$2,824**	$4,341	-35%
	Single Family (Detached); less than 1,500 sf and low income	du	4.13	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	5.33	$4,651	$21	$346	$33	$63	$409	**$4,242**	$4,341	-2%
	Single Family (Detached); less than 1,500 sf	du	6.23	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	8.04	$7,017	$31	$511	$49	$93	$604	**$6,413**	$4,341	48%
	Single Family (Detached); 1,500 to 2,499 sf	du	7.81	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	10.08	$8,796	$39	$643	$62	$118	$761	**$8,035**	$4,341	85%
	Single Family (Detached); 2,500 sf or larger	du	8.82	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	11.39	$9,934	$44	$725	$70	$133	$858	**$9,076**	$4,341	109%
220	Multi-Family (Apartment)	du	6.60	Blend ITE 9th & FL Studies	5.10	5.60	FL Studies (LUC 220/230)	100%	n/a	6.56	$5,727	$26	$429	$41	$78	$507	**$5,220**	$3,048	71%
230	Residential Condominium/Townhouse	du	5.76	Blend ITE 9th & FL Studies	5.10	5.60	FL Studies (LUC 220/230)	100%	n/a	5.73	$4,998	$23	$379	$36	$68	$447	**$4,551**	$3,048	49%
240	Mobile Home Park	du	4.17	FL Studies	4.60	5.10	FL Studies	100%	n/a	3.74	$3,263	$15	$247	$24	$46	$293	**$2,970**	$2,658	12%
253	Assisted Living/Congregate Care Facility	du	2.25	Blend ITE 9th & FL Studies	3.08	3.58	FL Studies	72%	FL Studies	0.97	$849	$4	$66	$6	$11	$77	**$772**	-	-
260	Recreational Home/Vehicle	du	3.16	ITE 9th Edition	6.62	7.12	Same as LUC 210	100%	n/a	4.08	$3,559	$16	$264	$25	$47	$311	**$3,248**	$1,433	127%
	LODGING:																		
310	Hotel	room	6.30	Blend ITE 9th & FL Studies	6.26	6.76	FL Studies	66%	FL Studies	5.08	$4,428	$20	$330	$31	$59	$389	**$4,039**	$1,878	115%
320	Motel	room	5.63	ITE 9th Edition	4.34	4.84	FL Studies	77%	FL Studies	3.67	$3,201	$15	$247	$23	$44	$291	**$2,910**	$1,878	55%
	RECREATION:																		
430	Golf Course[3]	hole	35.74	ITE 9th Edition	6.62	7.12	Same as LUC 210	90%	FL Studies (Pinellas County)	41.52	$36,227	$161	$2,654	$254	$483	$3,137	**$33,090**	$9,781	238%
491	Racquet Club	1,000 sf	14.03	ITE 9th Edition	5.15	5.65	Same as LUC 710	94%	Same as LUC 492 (Appendix A)	13.24	$11,555	$52	$857	$83	$158	$1,015	**$10,540**	$4,616	128%
	INSTITUTIONS:																		
520	Elementary School (Private)	1,000 sf	15.43	ITE 9th Edition	4.30	4.80	FL Studies (Pinellas County)	80%	FL Studies (Pinellas County)	10.35	$9,030	$42	$692	$66	$125	$817	**$8,213**	$789	941%
522	Middle School (Private)	1,000 sf	13.78	ITE 9th Edition	4.30	4.80	FL Studies (Pinellas County)	90%	FL Studies (Pinellas County)	10.40	$9,073	$42	$692	$66	$125	$817	**$8,256**	-	-
530	High School (Private)	1,000 sf	12.89	ITE 9th Edition	4.30	4.80	FL Studies (Pinellas County)	90%	FL Studies (Pinellas County)	9.73	$8,487	$39	$643	$62	$118	$761	**$7,726**	$1,500	415%
540	University (7,500 or fewer students)	student	2.00	ITE Regression Analysis	6.62	7.12	Same as LUC 210	90%	FL Studies (Pinellas County)	2.32	$2,027	$9	$148	$14	$27	$175	**$1,852**	-	-
550	University (more than 7,500 students)	student	1.50	ITE Regression Analysis	6.62	7.12	Same as LUC 210	90%	FL Studies (Pinellas County)	1.74	$1,520	$7	$115	$11	$21	$136	**$1,384**	-	-
560	Place of Worship	1,000 sf	9.11	ITE 9th Edition	3.90	4.40	FL Studies (Pinellas County)	90%	FL Studies (Pinellas County)	6.24	$5,440	$25	$412	$40	$76	$488	**$4,952**	$2,339	112%
565	Day Care Center	1,000 sf	71.88	Blend ITE 9th & FL Studies	2.03	2.53	FL Studies	73%	FL Studies	20.77	$18,122	$93	$1,533	$147	$279	$1,812	**$16,310**	$1,488	996%

Table D-3 (continued)
Calculated Roadway Impact Fee Schedule – Consumption-Based, V/C 0.48

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length	Total Trip Length	Trip Length Source	Percent New Trips	% New Trips Source	Net VMT[1]	Total Impact Cost	Annual Cap. Imp. Credit	Cap. Imp. Credit	Annual Debt Credit	Debt Service Credit	Total Credit[2]	Net Impact Fee	Current Impact Fee (District 2)	% Change
	INSTITUTIONS:																		
610	Hospital	1,000 sf	13.22	ITE 9th Edition	6.62	7.12	Same as LUC 210	77%	FL Studies (Pinellas County)	13.14	$11,465	$51	$841	$81	$154	$995	**$10,470**	$3,595	191%
620	Nursing Home	1,000 sf	7.60	ITE 9th Edition	2.59	3.09	FL Studies	89%	FL Studies	3.42	$2,980	$15	$247	$23	$44	$291	**$2,689**	$3,825	-30%
	OFFICE:																		
710	General Office 50,000 sf or less[4]	1,000 sf	15.50	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	14.32	$12,494	$57	$939	$89	$169	$1,108	**$11,386**	$2,824	303%
	General Office 50,001-100,000 sf[4]	1,000 sf	13.13	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	12.13	$10,584	$48	$791	$76	$144	$935	**$9,649**	$2,824	242%
	General Office 100,001-200,000 sf[4]	1,000 sf	11.12	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	10.27	$8,963	$41	$676	$64	$122	$798	**$8,165**	$2,824	189%
	General Office 200,001-400,000 sf[4]	1,000 sf	9.41	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	8.69	$7,585	$34	$560	$54	$103	$663	**$6,922**	$2,824	145%
	General Office greater than 400,000 sf[4]	1,000 sf	8.54	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	7.89	$6,884	$31	$511	$49	$93	$604	**$6,280**	$2,824	122%
720	Medical Office	1,000 sf	23.83	FL Studies	5.55	6.05	FL Studies	89%	FL Studies	22.95	$20,026	$90	$1,483	$143	$272	$1,755	**$18,271**	$3,241	464%
750	Office Park	1,000 sf	11.70	Blend ITE 9th & FL Studies	7.11	7.61	FL Studies	89%	Same as LUC 770 (Appendix A)	14.44	$12,596	$56	$923	$88	$167	$1,090	**$11,506**	$3,417	237%
760	Research & Development Center	1,000 sf	8.11	ITE 9th Edition	5.38	5.88	Same as LUC 770 (Appendix A)	89%	Same as LUC 770 (Appendix A)	7.57	$6,606	$30	$494	$47	$89	$583	**$6,023**	$2,427	148%
	RETAIL:																		
813	Discount Superstore, Free-Standing	1,000 sf	50.82	Blend ITE 9th & FL Studies	2.40	2.90	Same as LUC 820 (50k-200k sq ft)	67%	Same as LUC 820 (50k-200k sq ft)	15.94	$13,903	$69	$1,137	$110	$209	$1,346	**$12,557**	$6,357	98%
815	Discount Store, Free-Standing	1,000 sf	57.24	ITE 9th Edition	2.40	2.90	Same as LUC 820 (50k-200k sq ft)	67%	Same as LUC 820 (50k-200k sq ft)	17.95	$15,659	$78	$1,286	$124	$236	$1,522	**$14,137**	$9,648	47%
816	Hardware/Paint Store	1,000 sf	51.29	ITE 9th Edition	1.87	2.37	Same as LUC 820 (<50k sq ft)	56%	Same as LUC 820 (<50k sq ft)	10.47	$9,138	$48	$791	$76	$144	$935	**$8,203**	$4,417	86%
817	Nursery (Garden Center)	1,000 sf	68.10	ITE 9th Edition	1.87	2.37	Same as LUC 820 (<50k sq ft)	56%	Same as LUC 820 (<50k sq ft)	13.91	$12,133	$63	$1,038	$100	$190	$1,228	**$10,905**	$2,589	321%
818	Nursery (Wholesale)	1,000 sf	39.00	ITE 9th Edition	1.87	2.37	Same as LUC 820 (<50k sq ft)	56%	Same as LUC 820 (<50k sq ft)	7.96	$6,948	$36	$593	$57	$108	$701	**$6,247**	$2,799	123%
820	Retail 200,000 gsf or less[4]	1,000 sfgla	53.28	ITE 9th equation	2.40	2.90	TL Regression	67%	FL Curve	16.71	$14,576	$73	$1,203	$115	$218	$1,421	**$13,155**	$3,698	256%
	Retail 200,001-400,000 gsf[4]	1,000 sfgla	41.80	ITE 9th equation	2.64	3.14	TL Regression	73%	FL Curve	15.71	$13,705	$67	$1,104	$106	$201	$1,305	**$12,400**	$3,698	235%
	Retail greater than 400,000 gsf[4]	1,000 sfgla	36.27	ITE 9th equation	2.87	3.37	TL Regression	76%	FL Curve	15.43	$13,459	$65	$1,071	$103	$196	$1,267	**$12,192**	$3,698	230%
848	Tire Store	1,000 sf	24.87	ITE 9th Edition	3.62	4.12	Same as LUC 942 (Appendix A)	72%	Same as LUC 942 (Appendix A)	12.64	$11,028	$52	$857	$82	$156	$1,013	**$10,015**	$2,682	273%
857	Discount Club	1,000 sf	41.80	ITE 9th Edition	2.40	2.90	Same as LUC 820 (50k-200k sq ft)	67%	Same as LUC 820 (50k-200k sq ft)	13.11	$11,435	$57	$939	$90	$171	$1,110	**$10,325**	$9,599	8%
863	Electronics Superstore	1,000 sf	45.04	ITE 9th Edition	1.87	2.37	Same as LUC 820 (<50k sq ft)	56%	Same as LUC 820 (<50k sq ft)	9.20	$8,024	$42	$692	$66	$125	$817	**$7,207**	$10,343	-30%
880/881	Pharmacy with or without Drive-Thru	1,000 sf	95.96	Blend ITE 9th & FL Studies	2.08	2.58	FL Studies	32%	FL Studies	12.45	$10,866	$56	$923	$88	$167	$1,090	**$9,776**	$6,327	55%
890	Furniture Store	1,000 sf	5.06	ITE 9th Edition	6.09	6.59	FL Studies	54%	FL Studies	3.24	$2,831	$13	$214	$20	$38	$252	**$2,579**	$1,452	78%

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Table D-3 (continued)
Calculated Roadway Impact Fee Schedule – Consumption-Based, V/C 0.48

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length	Total Trip Length	Trip Length Source	Percent New Trips	% New Trips Source	Net VMT[1]	Total Impact Cost	Annual Cap. Imp. Credit	Cap. Imp. Credit	Annual Debt Credit	Debt Service Credit	Total Credit[2]	Net Impact Fee	Current Impact Fee (District 2)	% Change
	RETAIL:																		
944/946	Service Station with or without Car Wash	fuel pos.	157.33	ITE 9th Edition (944 & 946 Blend)	1.90	2.40	FL Studies	23%	FL Studies	13.41	$11,697	$61	$1,005	$96	$182	$1,187	**$10,510**	$3,024	248%
947	Car Wash, Self-Service	bay	43.94	Blend ITE 9th & FL Studies	2.18	2.68	FL Studies	68%	FL Studies	12.70	$11,082	$56	$923	$89	$169	$1,092	**$9,990**	-	-
	INDUSTRIAL:																		
140	Manufacturing	1,000 sf	3.82	ITE 9th Edition	5.15	5.65	Same as LUC 710	92%	Same as LUC 710	3.53	$3,079	$14	$231	$22	$42	$273	**$2,806**	$1,839	53%
150	Warehouse	1,000 sf	3.56	ITE 9th Edition	5.15	5.65	Same as LUC 710	92%	Same as LUC 710	3.29	$2,870	$13	$214	$21	$40	$254	**$2,616**	$2,387	10%
151	Mini-Warehouse	1,000 sf	2.08	Blend ITE 9th & FL Studies	3.10	3.60	FL Studies (Pinellas County)	92%	Same as LUC 710	1.16	$1,009	$5	$82	$8	$15	$97	**$912**	$722	26%

1) Net VMT calculated as ((Trip Generation Rate* Trip Length* % New Trips)*(1-Interstate/Toll Facility Adjustment Factor)/2). This reflects the unit of vehicle miles of capacity consumed per unit of development and is multiplied by the cost per vehicle
2) Sum of the capital improvement credit and the debt service credit
3) This rate should only be used if the golf course facility has more than 46,000 sq ft of ancillary structures. If not, use the "Retail <200,000 sq ft" rate.
4) The trip generation rates recommended for retail use an end-point regression value

*Average VMC per Lane Mile from Table 3 (9,000) adjusted by a factor of 0.48 (9,000 * 0.48 = 4,320)

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Table D-4
Calculated Roadway Impact Fee Schedule – Consumption-Based, V/C 0.56

	Sales/Fuel Tax	Debt				
$$ per Gallon to Capital:	$0.072	0.114	Unit Cost per Lane Mile:	$3,769,000		
Facility Life (Years):	25	2	Average VMC per Lane Mile:	5,040	Cost per VMC:	$747.82
Interest Rate:	3.50%		Fuel Efficiency:	18.73 mpg	County Adjustment Factor:	39.0%
			Effective Days per Year:	365		

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length	Total Trip Length	Trip Length Source	Percent New Trips	% New Trips Source	Net VMT[1]	Total Impact Cost	Annual Cap. Imp. Credit	Cap. Imp. Credit	Annual Debt Credit	Debt Service Credit	Total Credit[2]	Net Impact Fee	Current Impact Fee (District 2)	% Change
	RESIDENTIAL:																		
210	Single Family (Detached); less than 1,500 sf and very low income	du	2.75	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	3.55	$2,655	$14	$231	$22	$42	$273	**$2,382**	$4,341	-45%
	Single Family (Detached); less than 1,500 sf and low income	du	4.13	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	5.33	$3,987	$21	$346	$33	$63	$409	**$3,578**	$4,341	-18%
	Single Family (Detached); less than 1,500 sf	du	6.23	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	8.04	$6,014	$31	$511	$49	$93	$604	**$5,410**	$4,341	25%
	Single Family (Detached); 1,500 to 2,499 sf	du	7.81	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	10.08	$7,539	$39	$643	$62	$118	$761	**$6,778**	$4,341	56%
	Single Family (Detached); 2,500 sf or larger	du	8.82	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	11.39	$8,514	$44	$725	$70	$133	$858	**$7,656**	$4,341	76%
220	Multi-Family (Apartment)	du	6.60	Blend ITE 9th & FL Studies	5.10	5.60	FL Studies (LUC 220/230)	100%	n/a	6.56	$4,908	$26	$429	$41	$78	$507	**$4,401**	$3,048	44%
230	Residential Condominium/Townhouse	du	5.76	Blend ITE 9th & FL Studies	5.10	5.60	FL Studies (LUC 220/230)	100%	n/a	5.73	$4,284	$23	$379	$36	$68	$447	**$3,837**	$3,048	26%
240	Mobile Home Park	du	4.17	FL Studies	4.60	5.10	FL Studies	100%	n/a	3.74	$2,797	$15	$247	$24	$46	$293	**$2,504**	$2,658	-6%
253	Assisted Living/Congregate Care Facility	du	2.25	Blend ITE 9th & FL Studies	3.08	3.58	FL Studies	72%	FL Studies	0.97	$728	$4	$66	$6	$11	$77	**$651**	-	-
260	Recreational Home/Vehicle	du	3.16	ITE 9th Edition	6.62	7.12	Same as LUC 210	100%	n/a	4.08	$3,051	$16	$264	$25	$47	$311	**$2,740**	$1,433	91%
	LODGING:																		
310	Hotel	room	6.30	Blend ITE 9th & FL Studies	6.26	6.76	FL Studies	66%	FL Studies	5.08	$3,796	$20	$330	$31	$59	$389	**$3,407**	$1,878	81%
320	Motel	room	5.63	ITE 9th Edition	4.34	4.84	FL Studies	77%	FL Studies	3.67	$2,744	$15	$247	$23	$44	$291	**$2,453**	$1,878	31%
	RECREATION:																		
430	Golf Course[3]	hole	35.74	ITE 9th Edition	6.62	7.12	Same as LUC 210	90%	FL Studies (Pinellas County)	41.52	$31,052	$161	$2,654	$254	$483	$3,137	**$27,915**	$9,781	185%
491	Racquet Club	1,000 sf	14.03	ITE 9th Edition	5.15	5.65	Same as LUC 710	94%	Same as LUC 492 (Appendix A)	13.24	$9,904	$52	$857	$83	$158	$1,015	**$8,889**	$4,616	93%
	INSTITUTIONS:																		
520	Elementary School (Private)	1,000 sf	15.43	ITE 9th Edition	4.30	4.80	FL Studies (Pinellas County)	80%	FL Studies (Pinellas County)	10.35	$7,740	$42	$692	$66	$125	$817	**$6,923**	$789	777%
522	Middle School (Private)	1,000 sf	13.78	ITE 9th Edition	4.30	4.80	FL Studies (Pinellas County)	90%	FL Studies (Pinellas County)	10.40	$7,777	$42	$692	$66	$125	$817	**$6,960**	-	-
530	High School (Private)	1,000 sf	12.89	ITE 9th Edition	4.30	4.80	FL Studies (Pinellas County)	90%	FL Studies (Pinellas County)	9.73	$7,274	$39	$643	$62	$118	$761	**$6,513**	$1,500	334%
540	University (7,500 or fewer students)	student	2.00	ITE Regression Analysis	6.62	7.12	Same as LUC 210	90%	FL Studies (Pinellas County)	2.32	$1,738	$9	$148	$14	$27	$175	**$1,563**	-	-
550	University (more than 7,500 students)	student	1.50	ITE Regression Analysis	6.62	7.12	Same as LUC 210	90%	FL Studies (Pinellas County)	1.74	$1,303	$7	$115	$11	$21	$136	**$1,167**	-	-
560	Place of Worship	1,000 sf	9.11	ITE 9th Edition	3.90	4.40	FL Studies (Pinellas County)	90%	FL Studies (Pinellas County)	6.24	$4,663	$25	$412	$40	$76	$488	**$4,175**	$2,339	79%
565	Day Care Center	1,000 sf	71.88	Blend ITE 9th & FL Studies	2.03	2.53	FL Studies	73%	FL Studies	20.77	$15,533	$93	$1,533	$147	$279	$1,812	**$13,721**	$1,488	822%

Table D-4 (continued)
Calculated Roadway Impact Fee Schedule – Consumption-Based, V/C 0.56

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length	Total Trip Length	Trip Length Source	Percent New Trips	% New Trips Source	Net VMT[1]	Total Impact Cost	Annual Cap. Imp. Credit	Cap. Imp. Credit	Annual Debt Credit	Debt Service Credit	Total Credit[2]	Net Impact Fee	Current Impact Fee (District 2)	% Change
	INSTITUTIONS:																		
610	Hospital	1,000 sf	13.22	ITE 9th Edition	6.62	7.12	Same as LUC 210	77%	FL Studies (Pinellas County)	13.14	$9,827	$51	$841	$81	$154	$995	**$8,832**	$3,595	146%
620	Nursing Home	1,000 sf	7.60	ITE 9th Edition	2.59	3.09	FL Studies	89%	FL Studies	3.42	$2,555	$15	$247	$23	$44	$291	**$2,264**	$3,825	-41%
	OFFICE:																		
710	General Office 50,000 sf or less[4]	1,000 sf	15.50	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	14.32	$10,709	$57	$939	$89	$169	$1,108	**$9,601**	$2,824	240%
	General Office 50,001-100,000 sf[4]	1,000 sf	13.13	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	12.13	$9,072	$48	$791	$76	$144	$935	**$8,137**	$2,824	188%
	General Office 100,001-200,000 sf[4]	1,000 sf	11.12	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	10.27	$7,683	$41	$676	$64	$122	$798	**$6,885**	$2,824	144%
	General Office 200,001-400,000 sf[4]	1,000 sf	9.41	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	8.69	$6,502	$34	$560	$54	$103	$663	**$5,839**	$2,824	107%
	General Office greater than 400,000 sf[4]	1,000 sf	8.54	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	7.89	$5,900	$31	$511	$49	$93	$604	**$5,296**	$2,824	88%
720	Medical Office	1,000 sf	23.83	FL Studies	5.55	6.05	FL Studies	89%	FL Studies	22.95	$17,165	$90	$1,483	$143	$272	$1,755	**$15,410**	$3,241	376%
750	Office Park	1,000 sf	11.70	Blend ITE 9th & FL Studies	7.11	7.61	FL Studies	89%	Same as LUC 770 (Appendix A)	14.44	$10,796	$56	$923	$88	$167	$1,090	**$9,706**	$3,417	184%
760	Research & Development Center	1,000 sf	8.11	ITE 9th Edition	5.38	5.88	Same as LUC 770 (Appendix A)	89%	Same as LUC 770 (Appendix A)	7.57	$5,663	$30	$494	$47	$89	$583	**$5,080**	$2,427	109%
	RETAIL:																		
813	Discount Superstore, Free-Standing	1,000 sf	50.82	Blend ITE 9th & FL Studies	2.40	2.90	Same as LUC 820 (50k-200k sq ft)	67%	Same as LUC 820 (50k-200k sq ft)	15.94	$11,917	$69	$1,137	$110	$209	$1,346	**$10,571**	$6,357	66%
815	Discount Store, Free-Standing	1,000 sf	57.24	ITE 9th Edition	2.40	2.90	Same as LUC 820 (50k-200k sq ft)	67%	Same as LUC 820 (50k-200k sq ft)	17.95	$13,422	$78	$1,286	$124	$236	$1,522	**$11,900**	$9,648	23%
816	Hardware/Paint Store	1,000 sf	51.29	ITE 9th Edition	1.87	2.37	Same as LUC 820 (<50k sq ft)	56%	Same as LUC 820 (<50k sq ft)	10.47	$7,832	$48	$791	$76	$144	$935	**$6,897**	$4,417	56%
817	Nursery (Garden Center)	1,000 sf	68.10	ITE 9th Edition	1.87	2.37	Same as LUC 820 (<50k sq ft)	56%	Same as LUC 820 (<50k sq ft)	13.91	$10,399	$63	$1,038	$100	$190	$1,228	**$9,171**	$2,589	254%
818	Nursery (Wholesale)	1,000 sf	39.00	ITE 9th Edition	1.87	2.37	Same as LUC 820 (<50k sq ft)	56%	Same as LUC 820 (<50k sq ft)	7.96	$5,956	$36	$593	$57	$108	$701	**$5,255**	$2,799	88%
820	Retail 200,000 gsf or less[4]	1,000 sfgla	53.28	ITE 9th equation	2.40	2.90	TL Regression	67%	FL Curve	16.71	$12,493	$73	$1,203	$115	$218	$1,421	**$11,072**	$3,698	199%
	Retail 200,001-400,000 gsf[4]	1,000 sfgla	41.80	ITE 9th equation	2.64	3.14	TL Regression	73%	FL Curve	15.71	$11,747	$67	$1,104	$106	$201	$1,305	**$10,442**	$3,698	182%
	Retail greater than 400,000 gsf[4]	1,000 sfgla	36.27	ITE 9th equation	2.87	3.37	TL Regression	76%	FL Curve	15.43	$11,536	$65	$1,071	$103	$196	$1,267	**$10,269**	$3,698	178%
848	Tire Store	1,000 sf	24.87	ITE 9th Edition	3.62	4.12	Same as LUC 942 (Appendix A)	72%	Same as LUC 942 (Appendix A)	12.64	$9,453	$52	$857	$82	$156	$1,013	**$8,440**	$2,682	215%
857	Discount Club	1,000 sf	41.80	ITE 9th Edition	2.40	2.90	Same as LUC 820 (50k-200k sq ft)	67%	Same as LUC 820 (50k-200k sq ft)	13.11	$9,801	$57	$939	$90	$171	$1,110	**$8,691**	$9,599	-10%
863	Electronics Superstore	1,000 sf	45.04	ITE 9th Edition	1.87	2.37	Same as LUC 820 (<50k sq ft)	56%	Same as LUC 820 (<50k sq ft)	9.20	$6,878	$42	$692	$66	$125	$817	**$6,061**	$10,343	-41%
880/881	Pharmacy with or without Drive-Thru	1,000 sf	95.96	Blend ITE 9th & FL Studies	2.08	2.58	FL Studies	32%	FL Studies	12.45	$9,314	$56	$923	$88	$167	$1,090	**$8,224**	$6,327	30%
890	Furniture Store	1,000 sf	5.06	ITE 9th Edition	6.09	6.59	FL Studies	54%	FL Studies	3.24	$2,427	$13	$214	$20	$38	$252	**$2,175**	$1,452	50%

Table D-4 (continued)
Calculated Roadway Impact Fee Schedule – Consumption-Based, V/C 0.56

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length	Total Trip Length	Trip Length Source	Percent New Trips	% New Trips Source	Net VMT[1]	Total Impact Cost	Annual Cap. Imp. Credit	Cap. Imp. Credit	Annual Debt Credit	Debt Service Credit	Total Credit[2]	Net Impact Fee	Current Impact Fee (District 2)	% Change
	RETAIL:																		
944/946	Service Station with or without Car Wash	fuel pos.	157.33	ITE 9th Edition (944 & 946 Blend)	1.90	2.40	FL Studies	23%	FL Studies	13.41	$10,026	$61	$1,005	$96	$182	$1,187	**$8,839**	$3,024	192%
947	Car Wash, Self-Service	bay	43.94	Blend ITE 9th & FL Studies	2.18	2.68	FL Studies	68%	FL Studies	12.70	$9,499	$56	$923	$89	$169	$1,092	**$8,407**	-	-
	INDUSTRIAL:																		
140	Manufacturing	1,000 sf	3.82	ITE 9th Edition	5.15	5.65	Same as LUC 710	92%	Same as LUC 710	3.53	$2,639	$14	$231	$22	$42	$273	**$2,366**	$1,839	29%
150	Warehouse	1,000 sf	3.56	ITE 9th Edition	5.15	5.65	Same as LUC 710	92%	Same as LUC 710	3.29	$2,460	$13	$214	$21	$40	$254	**$2,206**	$2,387	-8%
151	Mini-Warehouse	1,000 sf	2.08	Blend ITE 9th & FL Studies	3.10	3.60	FL Studies (Pinellas County)	92%	Same as LUC 710	1.16	$865	$5	$82	$8	$15	$97	**$768**	$722	6%

1) Net VMT calculated as ((Trip Generation Rate* Trip Length* % New Trips)*(1-Interstate/Toll Facility Adjustment Factor)/2). This reflects the unit of vehicle miles of capacity consumed per unit of development and is multiplied by the cost per vehicle
2) Sum of the capital improvement credit and the debt service credit
3) This rate should only be used if the golf course facility has more than 46,000 sq ft of ancillary structures. If not, use the "Retail <200,000 sq ft" rate.
4) The trip generation rates recommended for retail use an end-point regression value

*Average VMC per Lane Mile from Table 3 (9,000) adjusted by a factor of 0.56 (9,000 * 0.56 = 5,040)

Table D-5
Calculated Roadway Impact Fee Schedule – Consumption-Based, V/C 1.00

	Sales/Fuel Tax	Debt				
$ per Gallon to Capital:	$0.072	0.114	Unit Cost per Lane Mile:	$3,769,000	Cost per VMC:	$418.78
Facility Life (Years):	25	2	Average VMC per Lane Mile:	9,000	County Adjustment Factor:	39.0%
Interest Rate:	3.50%		Fuel Efficiency:	18.73 mpg		
			Effective Days per Year:	365		

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length	Total Trip Length	Trip Length Source	Percent New Trips	% New Trips Source	Net VMT[1]	Total Impact Cost	Annual Cap. Imp. Credit	Cap. Imp. Credit	Annual Debt Credit	Debt Service Credit	Total Credit[2]	Net Impact Fee	Current Impact Fee (District 2)	% Change
	RESIDENTIAL:																		
210	Single Family (Detached); less than 1,500 sf and very low income	du	2.75	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	3.55	$1,487	$14	$231	$22	$42	$273	**$1,214**	$4,341	-72%
	Single Family (Detached); less than 1,500 sf and low income	du	4.13	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	5.33	$2,233	$21	$346	$33	$63	$409	**$1,824**	$4,341	-58%
	Single Family (Detached); less than 1,500 sf	du	6.23	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	8.04	$3,368	$31	$511	$49	$93	$604	**$2,764**	$4,341	-36%
	Single Family (Detached); 1,500 to 2,499 sf	du	7.81	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	10.08	$4,222	$39	$643	$62	$118	$761	**$3,461**	$4,341	-20%
	Single Family (Detached); 2,500 sf or larger	du	8.82	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	11.39	$4,768	$44	$725	$70	$133	$858	**$3,910**	$4,341	-10%
220	Multi-Family (Apartment)	du	6.60	Blend ITE 9th & FL Studies	5.10	5.60	FL Studies (LUC 220/230)	100%	n/a	6.56	$2,749	$26	$429	$41	$78	$507	**$2,242**	$3,048	-26%
230	Residential Condominium/Townhouse	du	5.76	Blend ITE 9th & FL Studies	5.10	5.60	FL Studies (LUC 220/230)	100%	n/a	5.73	$2,399	$23	$379	$36	$68	$447	**$1,952**	$3,048	-36%
240	Mobile Home Park	du	4.17	FL Studies	4.60	5.10	FL Studies	100%	n/a	3.74	$1,566	$15	$247	$24	$46	$293	**$1,273**	$2,658	-52%
253	Assisted Living/Congregate Care Facility	du	2.25	Blend ITE 9th & FL Studies	3.08	3.58	FL Studies	72%	FL Studies	0.97	$407	$4	$66	$6	$11	$77	**$330**	-	-
260	Recreational Home/Vehicle	du	3.16	ITE 9th Edition	6.62	7.12	Same as LUC 210	100%	n/a	4.08	$1,708	$16	$264	$25	$47	$311	**$1,397**	$1,433	-3%
	LODGING:																		
310	Hotel	room	6.30	Blend ITE 9th & FL Studies	6.26	6.76	FL Studies	66%	FL Studies	5.08	$2,126	$20	$330	$31	$59	$389	**$1,737**	$1,878	-8%
320	Motel	room	5.63	ITE 9th Edition	4.34	4.84	FL Studies	77%	FL Studies	3.67	$1,536	$15	$247	$23	$44	$291	**$1,245**	$1,878	-34%
	RECREATION:																		
430	Golf Course[3]	hole	35.74	ITE 9th Edition	6.62	7.12	Same as LUC 210	90%	FL Studies (Pinellas County)	41.52	$17,389	$161	$2,654	$254	$483	$3,137	**$14,252**	$9,781	46%
491	Racquet Club	1,000 sf	14.03	ITE 9th Edition	5.15	5.65	Same as LUC 710	94%	Same as LUC 492 (Appendix A)	13.24	$5,546	$52	$857	$83	$158	$1,015	**$4,531**	$4,616	-2%
	INSTITUTIONS:																		
520	Elementary School (Private)	1,000 sf	15.43	ITE 9th Edition	4.30	4.80	FL Studies (Pinellas County)	80%	FL Studies (Pinellas County)	10.35	$4,335	$42	$692	$66	$125	$817	**$3,518**	$789	346%
522	Middle School (Private)	1,000 sf	13.78	ITE 9th Edition	4.30	4.80	FL Studies (Pinellas County)	90%	FL Studies (Pinellas County)	10.40	$4,355	$42	$692	$66	$125	$817	**$3,538**	-	-
530	High School (Private)	1,000 sf	12.89	ITE 9th Edition	4.30	4.80	FL Studies (Pinellas County)	90%	FL Studies (Pinellas County)	9.73	$4,074	$39	$643	$62	$118	$761	**$3,313**	$1,500	121%
540	University (7,500 or fewer students)	student	2.00	ITE Regression Analysis	6.62	7.12	Same as LUC 210	90%	FL Studies (Pinellas County)	2.32	$973	$9	$148	$14	$27	$175	**$798**	-	-
550	University (more than 7,500 students)	student	1.50	ITE Regression Analysis	6.62	7.12	Same as LUC 210	90%	FL Studies (Pinellas County)	1.74	$730	$7	$115	$11	$21	$136	**$594**	-	-
560	Place of Worship	1,000 sf	9.11	ITE 9th Edition	3.90	4.40	FL Studies (Pinellas County)	90%	FL Studies (Pinellas County)	6.24	$2,611	$25	$412	$40	$76	$488	**$2,123**	$2,339	-9%
565	Day Care Center	1,000 sf	71.88	Blend ITE 9th & FL Studies	2.03	2.53	FL Studies	73%	FL Studies	20.77	$8,699	$93	$1,533	$147	$279	$1,812	**$6,887**	$1,488	363%

Table D-5 (continued)
Calculated Roadway Impact Fee Schedule – Consumption-Based, V/C 1.00

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length	Total Trip Length	Trip Length Source	Percent New Trips	% New Trips Source	Net VMT[1]	Total Impact Cost	Annual Cap. Imp. Credit	Cap. Imp. Credit	Annual Debt Credit	Debt Service Credit	Total Credit[2]	Net Impact Fee	Current Impact Fee (District 2)	% Change
	INSTITUTIONS:																		
610	Hospital	1,000 sf	13.22	ITE 9th Edition	6.62	7.12	Same as LUC 210	77%	FL Studies (Pinellas County)	13.14	$5,503	$51	$841	$81	$154	$995	**$4,508**	$3,595	25%
620	Nursing Home	1,000 sf	7.60	ITE 9th Edition	2.59	3.09	FL Studies	89%	FL Studies	3.42	$1,431	$15	$247	$23	$44	$291	**$1,140**	$3,825	-70%
	OFFICE:																		
710	General Office 50,000 sf or less[4]	1,000 sf	15.50	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	14.32	$5,997	$57	$939	$89	$169	$1,108	**$4,889**	$2,824	73%
	General Office 50,001-100,000 sf[4]	1,000 sf	13.13	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	12.13	$5,080	$48	$791	$76	$144	$935	**$4,145**	$2,824	47%
	General Office 100,001-200,000 sf[4]	1,000 sf	11.12	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	10.27	$4,302	$41	$676	$64	$122	$798	**$3,504**	$2,824	24%
	General Office 200,001-400,000 sf[4]	1,000 sf	9.41	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	8.69	$3,641	$34	$560	$54	$103	$663	**$2,978**	$2,824	6%
	General Office greater than 400,000 sf[4]	1,000 sf	8.54	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	7.89	$3,304	$31	$511	$49	$93	$604	**$2,700**	$2,824	-4%
720	Medical Office	1,000 sf	23.83	FL Studies	5.55	6.05	FL Studies	89%	FL Studies	22.95	$9,612	$90	$1,483	$143	$272	$1,755	**$7,857**	$3,241	142%
750	Office Park	1,000 sf	11.70	Blend ITE 9th & FL Studies	7.11	7.61	FL Studies	89%	Same as LUC 770 (Appendix A)	14.44	$6,046	$56	$923	$88	$167	$1,090	**$4,956**	$3,417	45%
760	Research & Development Center	1,000 sf	8.11	ITE 9th Edition	5.38	5.88	Same as LUC 770 (Appendix A)	89%	Same as LUC 770 (Appendix A)	7.57	$3,171	$30	$494	$47	$89	$583	**$2,588**	$2,427	7%
	RETAIL:																		
813	Discount Superstore, Free-Standing	1,000 sf	50.82	Blend ITE 9th & FL Studies	2.40	2.90	Same as LUC 820 (50k-200k sq ft)	67%	Same as LUC 820 (50k-200k sq ft)	15.94	$6,673	$69	$1,137	$110	$209	$1,346	**$5,327**	$6,357	-16%
815	Discount Store, Free-Standing	1,000 sf	57.24	ITE 9th Edition	2.40	2.90	Same as LUC 820 (50k-200k sq ft)	67%	Same as LUC 820 (50k-200k sq ft)	17.95	$7,516	$78	$1,286	$124	$236	$1,522	**$5,994**	$9,648	-38%
816	Hardware/Paint Store	1,000 sf	51.29	ITE 9th Edition	1.87	2.37	Same as LUC 820 (<50k sq ft)	56%	Same as LUC 820 (<50k sq ft)	10.47	$4,386	$48	$791	$76	$144	$935	**$3,451**	$4,417	-22%
817	Nursery (Garden Center)	1,000 sf	68.10	ITE 9th Edition	1.87	2.37	Same as LUC 820 (<50k sq ft)	56%	Same as LUC 820 (<50k sq ft)	13.91	$5,824	$63	$1,038	$100	$190	$1,228	**$4,596**	$2,589	78%
818	Nursery (Wholesale)	1,000 sf	39.00	ITE 9th Edition	1.87	2.37	Same as LUC 820 (<50k sq ft)	56%	Same as LUC 820 (<50k sq ft)	7.96	$3,335	$36	$593	$57	$108	$701	**$2,634**	$2,799	-6%
820	Retail 200,000 gsf or less[4]	1,000 sfgla	53.28	ITE 9th equation	2.40	2.90	TL Regression	67%	FL Curve	16.71	$6,996	$73	$1,203	$115	$218	$1,421	**$5,575**	$3,698	51%
	Retail 200,001-400,000 gsf[4]	1,000 sfgla	41.80	ITE 9th equation	2.64	3.14	TL Regression	73%	FL Curve	15.71	$6,578	$67	$1,104	$106	$201	$1,305	**$5,273**	$3,698	43%
	Retail greater than 400,000 gsf[4]	1,000 sfgla	36.27	ITE 9th equation	2.87	3.37	TL Regression	76%	FL Curve	15.43	$6,460	$65	$1,071	$103	$196	$1,267	**$5,193**	$3,698	40%
848	Tire Store	1,000 sf	24.87	ITE 9th Edition	3.62	4.12	Same as LUC 942 (Appendix A)	72%	Same as LUC 942 (Appendix A)	12.64	$5,293	$52	$857	$82	$156	$1,013	**$4,280**	$2,682	60%
857	Discount Club	1,000 sf	41.80	ITE 9th Edition	2.40	2.90	Same as LUC 820 (50k-200k sq ft)	67%	Same as LUC 820 (50k-200k sq ft)	13.11	$5,489	$57	$939	$90	$171	$1,110	**$4,379**	$9,599	-54%
863	Electronics Superstore	1,000 sf	45.04	ITE 9th Edition	1.87	2.37	Same as LUC 820 (<50k sq ft)	56%	Same as LUC 820 (<50k sq ft)	9.20	$3,852	$42	$692	$66	$125	$817	**$3,035**	$10,343	-71%
880/881	Pharmacy with or without Drive-Thru	1,000 sf	95.96	Blend ITE 9th & FL Studies	2.08	2.58	FL Studies	32%	FL Studies	12.45	$5,216	$56	$923	$88	$167	$1,090	**$4,126**	$6,327	-35%
890	Furniture Store	1,000 sf	5.06	ITE 9th Edition	6.09	6.59	FL Studies	54%	FL Studies	3.24	$1,359	$13	$214	$20	$38	$252	**$1,107**	$1,452	-24%

Table D-5 (continued)
Calculated Roadway Impact Fee Schedule – Consumption-Based, V/C 1.00

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length	Total Trip Length	Trip Length Source	Percent New Trips	% New Trips Source	Net VMT[1]	Total Impact Cost	Annual Cap. Imp. Credit	Cap. Imp. Credit	Annual Debt Credit	Debt Service Credit	Total Credit[2]	Net Impact Fee	Current Impact Fee (District 2)	% Change
	RETAIL:																		
944/946	Service Station with or without Car Wash	fuel pos.	157.33	ITE 9th Edition (944 & 946 Blend)	1.90	2.40	FL Studies	23%	FL Studies	13.41	$5,615	$61	$1,005	$96	$182	$1,187	**$4,428**	$3,024	46%
947	Car Wash, Self-Service	bay	43.94	Blend ITE 9th & FL Studies	2.18	2.68	FL Studies	68%	FL Studies	12.70	$5,319	$56	$923	$89	$169	$1,092	**$4,227**	-	-
	INDUSTRIAL:																		
140	Manufacturing	1,000 sf	3.82	ITE 9th Edition	5.15	5.65	Same as LUC 710	92%	Same as LUC 710	3.53	$1,478	$14	$231	$22	$42	$273	**$1,205**	$1,839	-35%
150	Warehouse	1,000 sf	3.56	ITE 9th Edition	5.15	5.65	Same as LUC 710	92%	Same as LUC 710	3.29	$1,377	$13	$214	$21	$40	$254	**$1,123**	$2,387	-53%
151	Mini-Warehouse	1,000 sf	2.08	Blend ITE 9th & FL Studies	3.10	3.60	FL Studies (Pinellas County)	92%	Same as LUC 710	1.16	$484	$5	$82	$8	$15	$97	**$387**	$722	-46%

1) Net VMT calculated as ((Trip Generation Rate* Trip Length* % New Trips)*(1-Interstate/Toll Facility Adjustment Factor)/2). This reflects the unit of vehicle miles of capacity consumed per unit of development and is multiplied by the cost per vehicle
2) Sum of the capital improvement credit and the debt service credit
3) This rate should only be used if the golf course facility has more than 46,000 sq ft of ancillary structures. If not, use the "Retail <200,000 sq ft" rate.
4) The trip generation rates recommended for retail use an end-point regression value

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Table D-6
Calculated Roadway Impact Fee Schedule – Needs-Based

Unit Cost per Lane Mile: $3,769,000 | Cost per VMC: $1,564
Credit: 20% | County Adjustment Factor: 39.0%

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length	Total Trip Length	Trip Length Source	Percent New Trips	% New Trips Source	Net VMT[1]	Total Impact Cost	Cap. Imp. Credit[2]	Net Impact Fee	Current Impact Fee (District 2)	% Change
	RESIDENTIAL:														
210	Single Family (Detached); less than 1,500 sf and very low income	du	2.75	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	3.55	$5,552	$1,110	**$4,442**	$4,341	2%
	Single Family (Detached); less than 1,500 sf and low income	du	4.13	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	5.33	$8,338	$1,668	**$6,670**	$4,341	54%
	Single Family (Detached); less than 1,500 sf	du	6.23	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	8.04	$12,578	$2,516	**$10,062**	$4,341	132%
	Single Family (Detached); 1,500 to 2,499 sf	du	7.81	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	10.08	$15,768	$3,154	**$12,614**	$4,341	191%
	Single Family (Detached); 2,500 sf or larger	du	8.82	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	11.39	$17,807	$3,561	**$14,246**	$4,341	228%
220	Multi-Family (Apartment)	du	6.60	Blend ITE 9th & FL Studies	5.10	5.60	FL Studies (LUC 220/230)	100%	n/a	6.56	$10,266	$2,053	**$8,213**	$3,048	170%
230	Residential Condominium/Townhouse	du	5.76	Blend ITE 9th & FL Studies	5.10	5.60	FL Studies (LUC 220/230)	100%	n/a	5.73	$8,959	$1,792	**$7,167**	$3,048	135%
240	Mobile Home Park	du	4.17	FL Studies	4.60	5.10	FL Studies	100%	n/a	3.74	$5,850	$1,170	**$4,680**	$2,658	76%
253	Assisted Living/Congregate Care Facility	du	2.25	Blend ITE 9th & FL Studies	3.08	3.58	FL Studies	72%	FL Studies	0.97	$1,522	$304	**$1,218**	-	-
260	Recreational Home/Vehicle	du	3.16	ITE 9th Edition	6.62	7.12	Same as LUC 210	100%	n/a	4.08	$6,380	$1,276	**$5,104**	$1,433	256%
	LODGING:														
310	Hotel	room	6.30	Blend ITE 9th & FL Studies	6.26	6.76	FL Studies	66%	FL Studies	5.08	$7,938	$1,588	**$6,350**	$1,878	238%
320	Motel	room	5.63	ITE 9th Edition	4.34	4.84	FL Studies	77%	FL Studies	3.67	$5,738	$1,148	**$4,590**	$1,878	144%
	RECREATION:														
430	Golf Course[3]	hole	35.74	ITE 9th Edition	6.62	7.12	Same as LUC 210	90%	FL Studies (Pinellas County)	41.52	$64,942	$12,988	**$51,954**	$9,781	431%
491	Racquet Club	1,000 sf	14.03	ITE 9th Edition	5.15	5.65	Same as LUC 710	94%	Same as LUC 492 (Appendix A)	13.24	$20,714	$4,143	**$16,571**	$4,616	259%
	INSTITUTIONS:														
520	Elementary School (Private)	1,000 sf	15.43	ITE 9th Edition	4.30	4.80	FL Studies (Pinellas County)	80%	FL Studies (Pinellas County)	10.35	$16,188	$3,238	**$12,950**	$789	1541%
522	Middle School (Private)	1,000 sf	13.78	ITE 9th Edition	4.30	4.80	FL Studies (Pinellas County)	90%	FL Studies (Pinellas County)	10.40	$16,264	$3,253	**$13,011**	-	-
530	High School (Private)	1,000 sf	12.89	ITE 9th Edition	4.30	4.80	FL Studies (Pinellas County)	90%	FL Studies (Pinellas County)	9.73	$15,214	$3,043	**$12,171**	$1,500	711%
540	University (7,500 or fewer students)	student	2.00	ITE Regression Analysis	6.62	7.12	Same as LUC 210	90%	FL Studies (Pinellas County)	2.32	$3,634	$727	**$2,907**	-	-

Table D-6 (continued)
Calculated Roadway Impact Fee Schedule – Needs-Based

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length	Total Trip Length	Trip Length Source	Percent New Trips	% New Trips Source	Net VMT[1]	Total Impact Cost	Cap. Imp. Credit[2]	Net Impact Fee	Current Impact Fee (District 2)	% Change
	INSTITUTIONS:														
550	University (more than 7,500 students)	student	1.50	ITE Regression Analysis	6.62	7.12	Same as LUC 210	90%	FL Studies (Pinellas County)	1.74	$2,726	$545	**$2,181**	-	-
560	Place of Worship	1,000 sf	9.11	ITE 9th Edition	3.90	4.40	FL Studies (Pinellas County)	90%	FL Studies (Pinellas County)	6.24	$9,752	$1,950	**$7,802**	$2,339	234%
565	Day Care Center	1,000 sf	71.88	Blend ITE 9th & FL Studies	2.03	2.53	FL Studies	73%	FL Studies	20.77	$32,486	$6,497	**$25,989**	$1,488	1647%
610	Hospital	1,000 sf	13.22	ITE 9th Edition	6.62	7.12	Same as LUC 210	77%	FL Studies (Pinellas County)	13.14	$20,552	$4,110	**$16,442**	$3,595	357%
620	Nursing Home	1,000 sf	7.60	ITE 9th Edition	2.59	3.09	FL Studies	89%	FL Studies	3.42	$5,343	$1,069	**$4,274**	$3,825	12%
	OFFICE:														
710	General Office 50,000 sf or less[4]	1,000 sf	15.50	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	14.32	$22,397	$4,479	**$17,918**	$2,824	535%
	General Office 50,001-100,000 sf[4]	1,000 sf	13.13	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	12.13	$18,973	$3,795	**$15,178**	$2,824	438%
	General Office 100,001-200,000 sf[4]	1,000 sf	11.12	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	10.27	$16,068	$3,214	**$12,854**	$2,824	355%
	General Office 200,001-400,000 sf[4]	1,000 sf	9.41	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	8.69	$13,597	$2,719	**$10,878**	$2,824	285%
	General Office greater than 400,000 sf[4]	1,000 sf	8.54	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	7.89	$12,340	$2,468	**$9,872**	$2,824	250%
720	Medical Office	1,000 sf	23.83	FL Studies	5.55	6.05	FL Studies	89%	FL Studies	22.95	$35,899	$7,180	**$28,719**	$3,241	786%
750	Office Park	1,000 sf	11.70	Blend ITE 9th & FL Studies	7.11	7.61	FL Studies	89%	Same as LUC 770 (Appendix A)	14.44	$22,580	$4,516	**$18,064**	$3,417	429%
760	Research & Development Center	1,000 sf	8.11	ITE 9th Edition	5.38	5.88	Same as LUC 770 (Appendix A)	89%	Same as LUC 770 (Appendix A)	7.57	$11,843	$2,369	**$9,474**	$2,427	290%
	RETAIL:														
813	Discount Superstore, Free-Standing	1,000 sf	50.82	Blend ITE 9th & FL Studies	2.40	2.90	Same as LUC 820 (50k-200k sq ft)	67%	Same as LUC 820 (50k-200k sq ft)	15.94	$24,923	$4,985	**$19,938**	$6,357	214%
815	Discount Store, Free-Standing	1,000 sf	57.24	ITE 9th Edition	2.40	2.90	Same as LUC 820 (50k-200k sq ft)	67%	Same as LUC 820 (50k-200k sq ft)	17.95	$28,071	$5,614	**$22,457**	$9,648	133%
816	Hardware/Paint Store	1,000 sf	51.29	ITE 9th Edition	1.87	2.37	Same as LUC 820 (<50k sq ft)	56%	Same as LUC 820 (<50k sq ft)	10.47	$16,381	$3,276	**$13,105**	$4,417	197%
817	Nursery (Garden Center)	1,000 sf	68.10	ITE 9th Edition	1.87	2.37	Same as LUC 820 (<50k sq ft)	56%	Same as LUC 820 (<50k sq ft)	13.91	$21,749	$4,350	**$17,399**	$2,589	572%
818	Nursery (Wholesale)	1,000 sf	39.00	ITE 9th Edition	1.87	2.37	Same as LUC 820 (<50k sq ft)	56%	Same as LUC 820 (<50k sq ft)	7.96	$12,456	$2,491	**$9,965**	$2,799	256%
820	Retail 200,000 gsf or less[4]	1,000 sfgla	53.28	ITE 9th equation	2.40	2.90	TL Regression	67%	FL Curve	16.71	$26,129	$5,226	**$20,903**	$3,698	465%

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Table D-6 (continued)
Calculated Roadway Impact Fee Schedule – Needs-Based

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length	Total Trip Length	Trip Length Source	Percent New Trips	% New Trips Source	Net VMT[1]	Total Impact Cost	Cap. Imp. Credit[2]	Net Impact Fee	Current Impact Fee (District 2)	% Change
	RETAIL:														
820	Retail 200,001-400,000 gsf[4]	1,000 sfgla	41.80	ITE 9th equation	2.64	3.14	TL Regression	73%	FL Curve	15.71	$24,568	$4,914	**$19,654**	$3,698	432%
	Retail greater than 400,000 gsf[4]	1,000 sfgla	36.27	ITE 9th equation	2.87	3.37	TL Regression	76%	FL Curve	15.43	$24,128	$4,826	**$19,302**	$3,698	422%
848	Tire Store	1,000 sf	24.87	ITE 9th Edition	3.62	4.12	Same as LUC 942 (Appendix A)	72%	Same as LUC 942 (Appendix A)	12.64	$19,769	$3,954	**$15,815**	$2,682	490%
857	Discount Club	1,000 sf	41.80	ITE 9th Edition	2.40	2.90	Same as LUC 820 (50k-200k sq ft)	67%	Same as LUC 820 (50k-200k sq ft)	13.11	$20,499	$4,100	**$16,399**	$9,599	71%
863	Electronics Superstore	1,000 sf	45.04	ITE 9th Edition	1.87	2.37	Same as LUC 820 (<50k sq ft)	56%	Same as LUC 820 (<50k sq ft)	9.20	$14,385	$2,877	**$11,508**	$10,343	11%
880/881	Pharmacy with or without Drive-Thru	1,000 sf	95.96	Blend ITE 9th & FL Studies	2.08	2.58	FL Studies	32%	FL Studies	12.45	$19,479	$3,896	**$15,583**	$6,327	146%
890	Furniture Store	1,000 sf	5.06	ITE 9th Edition	6.09	6.59	FL Studies	54%	FL Studies	3.24	$5,075	$1,015	**$4,060**	$1,452	180%
944/946	Service Station with or without Car Wash	fuel pos.	157.33	ITE 9th Edition (944 & 946 Blend)	1.90	2.40	FL Studies	23%	FL Studies	13.41	$20,968	$4,194	**$16,774**	$3,024	455%
947	Car Wash, Self-Service	bay	43.94	Blend ITE 9th & FL Studies	2.18	2.68	FL Studies	68%	FL Studies	12.70	$19,865	$3,973	**$15,892**	-	-
	INDUSTRIAL:														
140	Manufacturing	1,000 sf	3.82	ITE 9th Edition	5.15	5.65	Same as LUC 710	92%	Same as LUC 710	3.53	$5,520	$1,104	**$4,416**	$1,839	140%
150	Warehouse	1,000 sf	3.56	ITE 9th Edition	5.15	5.65	Same as LUC 710	92%	Same as LUC 710	3.29	$5,144	$1,029	**$4,115**	$2,387	72%
151	Mini-Warehouse	1,000 sf	2.08	Blend ITE 9th & FL Studies	3.10	3.60	FL Studies (Pinellas County)	92%	Same as LUC 710	1.16	$1,809	$362	**$1,447**	$722	100%

1) Net VMT calculated as ((Trip Generation Rate* Trip Length* % New Trips)*(1-Interstate/Toll Facility Adjustment Factor)/2). This reflects the unit of vehicle miles of capacity consumed per unit of development and is multiplied by the cost per vehicle
2) Sum of the capital improvement credit and the debt service credit
3) This rate should only be used if the golf course facility has more than 46,000 sq ft of ancillary structures. If not, use the "Retail <200,000 sq ft" rate.
4) The trip generation rates recommended for retail use an end-point regression value

Table D-7
Calculated Roadway Impact Fee Schedule – Needs-Based_Alternative

Unit Cost per Lane Mile: $3,769,000 | Cost per VMC: $884
Credit: 39% | County Adjustment Factor: 39.0%

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length	Total Trip Length	Trip Length Source	Percent New Trips	% New Trips Source	Net VMT[1]	Total Impact Cost	Cap. Imp. Credit[2]	Net Impact Fee	Current Impact Fee (District 2)	% Change
	RESIDENTIAL:														
210	Single Family (Detached); less than 1,500 sf and very low income	du	2.75	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	3.55	$3,138	$1,224	**$1,914**	$4,341	-56%
	Single Family (Detached); less than 1,500 sf and low income	du	4.13	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	5.33	$4,713	$1,838	**$2,875**	$4,341	-34%
	Single Family (Detached); less than 1,500 sf	du	6.23	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	8.04	$7,109	$2,773	**$4,336**	$4,341	0%
	Single Family (Detached); 1,500 to 2,499 sf	du	7.81	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	10.08	$8,912	$3,476	**$5,436**	$4,341	25%
	Single Family (Detached); 2,500 sf or larger	du	8.82	Appendix A Table A-6	6.62	7.12	FL Studies	100%	n/a	11.39	$10,065	$3,925	**$6,140**	$4,341	41%
220	Multi-Family (Apartment)	du	6.60	Blend ITE 9th & FL Studies	5.10	5.60	FL Studies (LUC 220/230)	100%	n/a	6.56	$5,802	$2,263	**$3,539**	$3,048	16%
230	Residential Condominium/Townhouse	du	5.76	Blend ITE 9th & FL Studies	5.10	5.60	FL Studies (LUC 220/230)	100%	n/a	5.73	$5,064	$1,975	**$3,089**	$3,048	1%
240	Mobile Home Park	du	4.17	FL Studies	4.60	5.10	FL Studies	100%	n/a	3.74	$3,307	$1,290	**$2,017**	$2,658	-24%
253	Assisted Living/Congregate Care Facility	du	2.25	Blend ITE 9th & FL Studies	3.08	3.58	FL Studies	72%	FL Studies	0.97	$860	$335	**$525**	-	-
260	Recreational Home/Vehicle	du	3.16	ITE 9th Edition	6.62	7.12	Same as LUC 210	100%	n/a	4.08	$3,606	$1,406	**$2,200**	$1,433	54%
	LODGING:														
310	Hotel	room	6.30	Blend ITE 9th & FL Studies	6.26	6.76	FL Studies	66%	FL Studies	5.08	$4,487	$1,750	**$2,737**	$1,878	46%
320	Motel	room	5.63	ITE 9th Edition	4.34	4.84	FL Studies	77%	FL Studies	3.67	$3,243	$1,265	**$1,978**	$1,878	5%
	RECREATION:														
430	Golf Course[3]	hole	35.74	ITE 9th Edition	6.62	7.12	Same as LUC 210	90%	FL Studies (Pinellas County)	41.52	$36,706	$14,315	**$22,391**	$9,781	129%
491	Racquet Club	1,000 sf	14.03	ITE 9th Edition	5.15	5.65	Same as LUC 710	94%	Same as LUC 492 (Appendix A)	13.24	$11,708	$4,566	**$7,142**	$4,616	55%
	INSTITUTIONS:														
520	Elementary School (Private)	1,000 sf	15.43	ITE 9th Edition	4.30	4.80	FL Studies (Pinellas County)	80%	FL Studies (Pinellas County)	10.35	$9,150	$3,569	**$5,581**	$789	607%
522	Middle School (Private)	1,000 sf	13.78	ITE 9th Edition	4.30	4.80	FL Studies (Pinellas County)	90%	FL Studies (Pinellas County)	10.40	$9,193	$3,585	**$5,608**	-	-
530	High School (Private)	1,000 sf	12.89	ITE 9th Edition	4.30	4.80	FL Studies (Pinellas County)	90%	FL Studies (Pinellas County)	9.73	$8,599	$3,354	**$5,245**	$1,500	250%
540	University (7,500 or fewer students)	student	2.00	ITE Regression Analysis	6.62	7.12	Same as LUC 210	90%	FL Studies (Pinellas County)	2.32	$2,054	$801	**$1,253**	-	-

Table D-7 (continued)
Calculated Roadway Impact Fee Schedule – Needs-Based_Alternative

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length	Total Trip Length	Trip Length Source	Percent New Trips	% New Trips Source	Net VMT[1]	Total Impact Cost	Cap. Imp. Credit[2]	Net Impact Fee	Current Impact Fee (District 2)	% Change
	INSTITUTIONS:														
550	University (more than 7,500 students)	student	1.50	ITE Regression Analysis	6.62	7.12	Same as LUC 210	90%	FL Studies (Pinellas County)	1.74	$1,541	$601	**$940**	-	-
560	Place of Worship	1,000 sf	9.11	ITE 9th Edition	3.90	4.40	FL Studies (Pinellas County)	90%	FL Studies (Pinellas County)	6.24	$5,512	$2,150	**$3,362**	$2,339	44%
565	Day Care Center	1,000 sf	71.88	Blend ITE 9th & FL Studies	2.03	2.53	FL Studies	73%	FL Studies	20.77	$18,362	$7,161	**$11,201**	$1,488	653%
610	Hospital	1,000 sf	13.22	ITE 9th Edition	6.62	7.12	Same as LUC 210	77%	FL Studies (Pinellas County)	13.14	$11,616	$4,530	**$7,086**	$3,595	97%
620	Nursing Home	1,000 sf	7.60	ITE 9th Edition	2.59	3.09	FL Studies	89%	FL Studies	3.42	$3,020	$1,178	**$1,842**	$3,825	-52%
	OFFICE:														
710	General Office 50,000 sf or less[4]	1,000 sf	15.50	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	14.32	$12,659	$4,937	**$7,722**	$2,824	173%
	General Office 50,001-100,000 sf[4]	1,000 sf	13.13	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	12.13	$10,724	$4,182	**$6,542**	$2,824	132%
	General Office 100,001-200,000 sf[4]	1,000 sf	11.12	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	10.27	$9,082	$3,542	**$5,540**	$2,824	96%
	General Office 200,001-400,000 sf[4]	1,000 sf	9.41	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	8.69	$7,685	$2,997	**$4,688**	$2,824	66%
	General Office greater than 400,000 sf[4]	1,000 sf	8.54	ITE 9th Edition	5.15	5.65	FL Studies	92%	FL Studies	7.89	$6,975	$2,720	**$4,255**	$2,824	51%
720	Medical Office	1,000 sf	23.83	FL Studies	5.55	6.05	FL Studies	89%	FL Studies	22.95	$20,291	$7,913	**$12,378**	$3,241	282%
750	Office Park	1,000 sf	11.70	Blend ITE 9th & FL Studies	7.11	7.61	FL Studies	89%	Same as LUC 770 (Appendix A)	14.44	$12,762	$4,977	**$7,785**	$3,417	128%
760	Research & Development Center	1,000 sf	8.11	ITE 9th Edition	5.38	5.88	Same as LUC 770 (Appendix A)	89%	Same as LUC 770 (Appendix A)	7.57	$6,694	$2,611	**$4,083**	$2,427	68%
	RETAIL:														
813	Discount Superstore, Free-Standing	1,000 sf	50.82	Blend ITE 9th & FL Studies	2.40	2.90	Same as LUC 820 (50k-200k sq ft)	67%	Same as LUC 820 (50k-200k sq ft)	15.94	$14,087	$5,494	**$8,593**	$6,357	35%
815	Discount Store, Free-Standing	1,000 sf	57.24	ITE 9th Edition	2.40	2.90	Same as LUC 820 (50k-200k sq ft)	67%	Same as LUC 820 (50k-200k sq ft)	17.95	$15,866	$6,188	**$9,678**	$9,648	0%
816	Hardware/Paint Store	1,000 sf	51.29	ITE 9th Edition	1.87	2.37	Same as LUC 820 (<50k sq ft)	56%	Same as LUC 820 (<50k sq ft)	10.47	$9,259	$3,611	**$5,648**	$4,417	28%
817	Nursery (Garden Center)	1,000 sf	68.10	ITE 9th Edition	1.87	2.37	Same as LUC 820 (<50k sq ft)	56%	Same as LUC 820 (<50k sq ft)	13.91	$12,293	$4,794	**$7,499**	$2,589	190%
818	Nursery (Wholesale)	1,000 sf	39.00	ITE 9th Edition	1.87	2.37	Same as LUC 820 (<50k sq ft)	56%	Same as LUC 820 (<50k sq ft)	7.96	$7,040	$2,746	**$4,294**	$2,799	53%
820	Retail 200,000 gsf or less[4]	1,000 sfgla	53.28	ITE 9th equation	2.40	2.90	TL Regression	67%	FL Curve	16.71	$14,769	$5,760	**$9,009**	$3,698	144%

Table D-7 (continued)
Calculated Roadway Impact Fee Schedule – Needs-Based_Alternative

ITE LUC	Land Use	Unit	Trip Rate	Trip Rate Source	Assessable Trip Length	Total Trip Length	Trip Length Source	Percent New Trips	% New Trips Source	Net VMT[1]	Total Impact Cost	Cap. Imp. Credit[2]	Net Impact Fee	Current Impact Fee (District 2)	% Change
	RETAIL:														
820	Retail 200,001-400,000 gsf[4]	1,000 sfgla	41.80	ITE 9th equation	2.64	3.14	TL Regression	73%	FL Curve	15.71	$13,886	$5,416	**$8,470**	$3,698	129%
	Retail greater than 400,000 gsf[4]	1,000 sfgla	36.27	ITE 9th equation	2.87	3.37	TL Regression	76%	FL Curve	15.43	$13,637	$5,318	**$8,319**	$3,698	125%
848	Tire Store	1,000 sf	24.87	ITE 9th Edition	3.62	4.12	Same as LUC 942 (Appendix A)	72%	Same as LUC 942 (Appendix A)	12.64	$11,174	$4,358	**$6,816**	$2,682	154%
857	Discount Club	1,000 sf	41.80	ITE 9th Edition	2.40	2.90	Same as LUC 820 (50k-200k sq ft)	67%	Same as LUC 820 (50k-200k sq ft)	13.11	$11,586	$4,519	**$7,067**	$9,599	-26%
863	Electronics Superstore	1,000 sf	45.04	ITE 9th Edition	1.87	2.37	Same as LUC 820 (<50k sq ft)	56%	Same as LUC 820 (<50k sq ft)	9.20	$8,130	$3,171	**$4,959**	$10,343	-52%
880/881	Pharmacy with or without Drive-Thru	1,000 sf	95.96	Blend ITE 9th & FL Studies	2.08	2.58	FL Studies	32%	FL Studies	12.45	$11,010	$4,294	**$6,716**	$6,327	6%
890	Furniture Store	1,000 sf	5.06	ITE 9th Edition	6.09	6.59	FL Studies	54%	FL Studies	3.24	$2,868	$1,119	**$1,749**	$1,452	21%
944/946	Service Station with or without Car Wash	fuel pos.	157.33	ITE 9th Edition (944 & 946 Blend)	1.90	2.40	FL Studies	23%	FL Studies	13.41	$11,852	$4,622	**$7,230**	$3,024	139%
947	Car Wash, Self-Service	bay	43.94	Blend ITE 9th & FL Studies	2.18	2.68	FL Studies	68%	FL Studies	12.70	$11,228	$4,379	**$6,849**	-	-
	INDUSTRIAL:														
140	Manufacturing	1,000 sf	3.82	ITE 9th Edition	5.15	5.65	Same as LUC 710	92%	Same as LUC 710	3.53	$3,120	$1,217	**$1,903**	$1,839	4%
150	Warehouse	1,000 sf	3.56	ITE 9th Edition	5.15	5.65	Same as LUC 710	92%	Same as LUC 710	3.29	$2,908	$1,134	**$1,774**	$2,387	-26%
151	Mini-Warehouse	1,000 sf	2.08	Blend ITE 9th & FL Studies	3.10	3.60	FL Studies (Pinellas County)	92%	Same as LUC 710	1.16	$1,023	$399	**$624**	$722	-14%

1) Net VMT calculated as ((Trip Generation Rate* Trip Length* % New Trips)*(1-Interstate/Toll Facility Adjustment Factor)/2). This reflects the unit of vehicle miles of capacity consumed per unit of development and is multiplied by the cost per vehicle
2) Sum of the capital improvement credit and the debt service credit
3) This rate should only be used if the golf course facility has more than 46,000 sq ft of ancillary structures. If not, use the "Retail <200,000 sq ft" rate.
4) The trip generation rates recommended for retail use an end-point regression value